

INSIDE DOPE

by GEORGE E. TAUBENECK

Baseball Stories
More Memories
Farms from Leo
Ruth's Successor?
Best-Remembered Homer

Baseball Stories

Pitcher's battles were not for "Uncle Jake" Ruppert. He wasn't happy unless his Yankees rubbed opponents' noses in the dirt by lop-sided scores.

Vaite Hoyt, a mighty fine hurler, had enjoyed a good year and sought a raise. He was stopped in his tracks by the millionaire brewer.

"I've been studying your record," frowned Ruppert. "Don't look so good. You win games 3-2, 2-1, 1-0. I got other pitchers who win by nine runs or more. What's the matter with you?"

Gehrig's mother was a wonderful woman. She was also an artist in the kitchen. But she knew as little about baseball as Lou did about cooking. And she cared much less about the national pastime than Lou and "the Babe" did about her culinary achievements.

Eventually she was bullied into attending a game at Yankee Stadium, and her worshipping son resolved to put on a show.

First two times at bat—going for that long one—he struck out (the second time he fell flat on his face, so mighty was his swing). Third time up he bloomed a Texas Leaguer which he stretched into a double with a prodigious slide. Meusel then singled to right field, and Gehrig barely beat the throw home with another cloud-of-dust slide.

At dinner that night his mother admonished:

"Lou, you're a nice boy. But you're too awkward. I saw you fall down three times out there today."

More Memories

Friend of ours once ghost-wrote a book for boys entitled: "How to Pitch." The outstanding author was an American League hurler (Hal Newhouser) who had an exceptionally good record.

Said pitcher-author was the idol of countless sand-lot baseball aspirants, and a great many of them bought "his" book. After reading it, they wrote him fan letters (hoping, of course, to get his autograph on a reply). All these letters were shunted to our friend for answering.

Most of the fan mail fell into a pattern. But one letter tickled his grand sense of humor. In a boyish scrawl, a lad in Bismarck, N. D. wrote:

"I read your book and I studied and learnt by heart everything you said. And the boys on our team elected me pitcher and captain. Something always seems to go wrong, though. We lost six games in a row. From your book I know what to do. Why do I do wrong? Please write another book on How Not to Pitch."

This suggestion struck our friend as being particularly funny at that time. The triple-starred "author" of that ghost-written book, "How to Pitch," was in the midst of the most disastrous losing streak of his long career.

This same chap recalls with great relish an anecdote about three wives of metropolitan New York baseball managers. Meeting for the first time at a post-season dinner for the Yankees, Giants, and Dodgers, they agreed to attend the Metropolitan Opera together during the winter months.

Northwith, the wife of the Yankees' manager purchased adjacent-seat season tickets for the trio. And they attended the first Opera together. Upon her return to Flatbush after the initial performance, the Dodger manager's wife nagged:

"Gimme \$10,000 right away!" Her spouse peered over the *Daily Ring Form*.

"Money," he admonished, "that's a lot of money. Uncle Branch Rickey doesn't pass out thousand-dollar bills for free on Sundays, you know. Why

(Concluded on Page 6, Column 1)

ISSUED EVERY MONDAY AT 450 W. FORT ST., DETROIT 26, MICHIGAN. ESTABLISHED 1926.



AIR CONDITIONING & REFRIGERATION News

Vol. 52, No. 17, Serial No. 1153

April 23, 1951

Subscription Price, \$5 Per Year

Reentered as second-class matter October 3, 1936 at the post office at Detroit, Michigan, under the Act of March 3, 1879. Trade Mark Registered U. S. Patent Office. Copyright 1951, by Business News Publishing Co.

April 30 Deadline For Filing of Pricing Charts

DETROIT—If no extension of the deadline is forthcoming, appliance retailers will have to file with their nearest Office of Price Stabilization by April 30 price statements and charts as required by Ceiling Price Regulation 7.

Among the items included in Amendment 2 to CPR 7 are: all radios, phonographs, television sets, recorders, and replacement parts and accessories, records, small electrical appliances (for home use), and kitchen cabinets.

On such items, retailers are required to prepare and file a "List Date Pricing Chart." A booklet on this "OPS Guide to Ceiling Price Regulation 7," available from OPS offices, explains how to do this. It is suggested that the retailer use worksheets, and then transfer the information to a final chart.

In filing the pricing chart, the retailer should make one for the OPS office, and the other for his own use in pricing. The chart should include the firm's business name and address, the price list date (probably Feb. 24), type of store (independent or chain, etc.), type of business (appliance store or furniture store), and the bracket of net dollar volume in which the store's annual volume on products covered by CPR 7 falls.

All pages of the chart should be numbered, and it must be signed by an official of the company. The number of the supporting invoices must be shown on the pricing chart. It is recommended that retailers keep worksheets for their future protection.

Narda Asks Extension On Appliances, TV

CHICAGO—Efforts to secure a 30-day extension of the deadline for filing pricing charts on radios, television, phonographs, records, small appliances, and other articles of merchandise included under Amendment 2 of OPS Ceiling Price Regulation 2 were initiated recently by the National Appliance and Radio Dealers Association.

A telegram was sent to Michael V. DiSalle, director of the Office of Price Stabilization, by Mort Farr, NARDA's president.

The telegram read: "Radio, television, and appliance retailers the nation over are subject to extreme hardship by the fact that pricing charts for articles under Amendment 2 of CPR 7 are scheduled for filing

(Concluded on Page 4, Column 5)

M-12 Certification Isn't Needed on Small Orders

DETROIT—In the April 16 issue it was stated that producers of copper products which are covered in NPA Order M-12 have demanded, in compliance with the order, that all orders carry a certification that the use of copper products order by the purchaser will not be in violation of Order M-12.

There are certain exceptions to this provision, which exceptions are listed in Sec. 11 (c) of Order M-12. Main exemption applicable to the refrigeration and air conditioning is that which says that the certification shall not be required to purchasers of quantities weighing 25 lbs. or less.

Other exemptions are to purchasers in foreign countries, and to orders placed by electric utilities under the provisions of Order M-50.

Refrigerants Off MRO Lists; Will Be Allocated

WASHINGTON, D. C.—All chemicals and certain other items have been removed from the list of "MRO" items on which business establishments can issue their own "DO-97" priority ratings for maintenance, repair, and operating supplies.

Most significant part of this amendment to National Production Authority Regulation 4 is that "DO-97" orders can no longer be signed by users of refrigerants to get gas for their refrigeration systems, and that refrigeration dealers, contractors, and service firms will have to depend upon their suppliers for allocations of "Freon," methyl chloride, sulphur dioxide, and other refrigerants.

The other significant items removed from the "MRO" list are all products on List "A" of the steel Order M-47, which includes such things as household refrigerators, home and farm freezers under 13 cu. ft., beer dispensing equipment, restaurant fixtures, appliances, and dishwashing equipment.

It is stated in the amendment that a "DO-97" which prior to April 16 was applied or extended to any contract or purchase order for any material listed in Table 1 of the amended order is hereby cancelled and such rating will no longer have any effect whatever.

With respect to "Freon" refrigerants, removal of refrigerants from the "MRO" Regulation 4 will mean that "Freon" will be distributed on an allotment basis by Kinetic Chemicals to its national distributors, with any "DO" orders other than "DO-97's" being taken off the top of Kinetic's production.

This means that the contractor or service firm will be dependent on his wholesale source of supply in the field for his supplies of "Freon."

Kinetic is urging that all links in the distribution chain attempt to direct distribution of "Freon" to channels where it will be used immediately, instead of permitting it to go into inventory or "stand-by" channels.

The producer says that its cylinder loss is evidence that much "Freon" has gone into dead storage. In 1950, for example, Kinetic shipped out 63,402 more cylinders than were returned during 1950. In the first three months an additional "loss" of 10,000 cylinders was recorded. Such stockpiling, if continued, with the corresponding loss of cylinders, could result in real hardships.

York Distributor Group Emphasizes 'DO' Orders At Special Conclave

YORK, Pa.—Members of York Corp.'s distributor sales advisory committee held an extraordinary session here April 12-13 to discuss the status of civilian business "under current limitation orders."

J. R. Hertzler, vice president and general sales manager, said that also under discussion was a national sales plan for authorized dealers and "DO" (defense order) contract bidders. Methods for securing "DO" business for dealers in air conditioning and refrigeration equipment were also surveyed by the committee.

The committee, composed of sales managers of York's nationwide distributorships, noted that the sharp curtailment of air conditioning and refrigeration materials would be felt in 1952.

Are 'Rated Orders' Important? NPA Official Tells Why

CHICAGO—Are priority ratings of importance now to the manufacturer of products using critical materials?

There has been a feeling in some quarters that the priority system isn't functioning very well, and that "rated orders" have no special significance. But most manufacturers who use critical materials have intensified their efforts to get rated orders.

Why they want rated orders was perhaps best explained in a discussion here before the Central Supply Association here last week by George E. Hoffman, a consultant for the Plumbing and Heating Branches of the Building Materials Division, National Production Authority.

"There are several reasons why manufacturers want ratings," Hoffman said, "among which are the following:

"First, DO's can be extended by the manufacturer to increase his supply of raw or semi-finished materials and thereby enable him to maintain a high production rate. Deliveries from his established sources of supply are frequently curtailed to conform to some historical purchase pattern. Therefore, each DO received by the supplier has the effect of increasing his quota of raw materials.

"Second, DO's serve the suppliers' convenience. The full impact of defense procurement has not yet been felt nor can its potential be accurately measured at this time. Hence, we find suppliers over-estimating the extent of the set aside required for filling anticipated rated orders. We also find suppliers using the absence of DO's as an excuse for declining orders from a new or untried customer.

"Rated orders must be accepted in the order of receipt or according to specified delivery dates which makes scheduling of such orders comparatively easy. On the other hand, if firm deliveries are promised on unrated orders, the receipt of each subsequent DO 'fouls up' the shipping schedule involving numerous revisions and much correspondence."

Hoffman said that suppliers, while being well aware of the limitations put upon the availability and use of DO's, have sometimes insisted on a rating, creating an impression that priorities are to be had for the asking. This, he said, leads to widespread misapprehension in that it tends to magnify the volume of DO orders outstanding and correspondingly exaggerates procurement difficulties without a rating.

Trading Post Trades Trade-Ins for Down Payment On New Refrigerators for Limited Income Families

REDONDO BEACH, Calif.—An effective answer to the "high down payment problem," particularly where refrigerators in the upper price brackets are concerned, has been developed by Charles and William Czuleger, owners of the Redondo Trading Post, Servel dealership at 110 Diamond St. here.

When sales began to fall off because few homeowners in the area could raise the \$100 or more required for down payment on higher priced refrigerators, the Czuleger brothers hit upon the idea of selling the prospect an old, but serviceable trade-in refrigerator to take care of family's food refrigeration needs until the down payment could be accumulated.

The purchaser of the reconditioned refrigerator was then allowed to trade it back at the full amount originally paid, when ready to buy the new box.

"It actually amounts to loaning the

CMP Effective July 1; NPA Rules On Basic Metals

Most Commercial Mfrs. Must File 3rd Quarter Requirements In May

WASHINGTON, D. C.—A Controlled Materials Plan will go into effect on July 1, the National Production Authority has announced.

The plan will allot specific quantities of steel, aluminum, and copper and copper alloys to defense and defense supporting production and construction.

In preparation for it, the NPA will require some manufacturers to file with it during May a detailed forecast of their third quarter requirements for these basic metals. Report forms and detailed instructions will be available about May 1.

The tentative NPA list of those who will have to make reports includes manufacturers of: commercial and industrial refrigeration and air conditioning equipment, industrial fans and blowers, heat exchangers, condensers, motors, electrical control apparatus, electrical welding apparatus including electrodes and welding rods, heating and cooking equipment other than residential, and repair and replacement parts.

On the list of those who tentatively will NOT have to make reports are manufacturers of: household refrigerators and freezers and comfort air conditioning, residential heating and cooking equipment, household electrical appliances, household service equipment such as dishwashers and water softeners, soda fountains and beer dispensing equipment, and vending machines.

The reports are being asked, it was indicated, so that the NPA can gauge the needs of reporting manufacturers and measure the impact of the defense program on their production, whether it is under the Controlled Materials Plan or not.

It appears that manufacturers of

(Concluded on Page 4, Column 3)

Dealers Ask Trade-In as Part of Down Payment

WASHINGTON, D. C.—Appliance and television dealers are continuing in their efforts to get a better break on credit regulations from the Federal Reserve Board.

Efforts to obtain a change in the regulation calling for a smaller down payment have met with pretty cold turn-downs—for the present. But the industry representatives have taken another tack—that of requesting that trade-ins be part of the down payment.

Big point made by the appliance and television representatives is that there is discrimination in favor of the automobile industry, in which trade-ins are permitted to count as part of the down payment. However, the Federal Reserve Board says that the automobile industry is favored because the trade-in setup is a "longtime trade practice" in the automobile field.

family a used box," Charles Czuleger indicated. "The customer is entitled to use it as long as necessary, while he saves the down payment necessary for purchase of a new refrigerator."

"We put no strings on the offer whatsoever, but have found that the right to trade it back in at full purchase price exercises a powerful link between store and customer."

"To date, every used box we have sold on this basis has been returned, and some of them have been out four or five times—in each instance, representing the sale of a new box."

The stock of trade-in refrigerators used for the purpose, are all in good running condition, but nothing has been done to rectify deficiencies in appearance, noisiness of operation, etc.

The Czuleger brothers naturally prefer that the old refrigerator in

(Concluded on Back Page, Column 1)

By eliminating losses
from leaking
liquid indicators
Leak-proof

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profits**

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Fedders Launches 1951 Room Cooler Promotion

All-Inclusive Program Hits 'Every Type of Prospect'

BUFFALO—Whatever the type of prospect for room coolers, and whatever the appeal needed to sell that prospect, Fedders-Quigan Corp. believes it has them covered with its room air conditioner advertising and sales promotion program for 1951.

The campaign is designed not only to promote sales of the company's line of room air conditioners, but also to tell the dealers exactly how to make the best use of the material.

The company has prepared an ambitious sales promotional kit for air conditioning distributors and dealers and has outlined a substantial national consumer and trade advertising program. The latter embraces magazines, newspapers, and television.

The sales promotional kit, according to R. E. Cassatt, Fedders manager of advertising and sales promotion, contains 22 aids to dealers—mostly point-of-sale items and practical hints for telephone, floor, and radio selling.

In addition, there are nine pieces of direct-mail advertising designed to fit into two separate campaigns. Campaign No. 1, entitled "4 Aces," contains three colorful pieces plus a full line envelope enclosure. Campaign No. 2 is entitled the "Honey" campaign and contains five two-color penny postcards with a sales message on each card.

For the distributor salesman there is an oversize presentation manual called "The Spotlight Is On Profits."

This manual describes the Fedders 11-model line ranging from the new 1/8 ton window unit to the 1 1/2-ton console. It points out the market for these units and outlines Fedders advertising plans and promotional materials.

There is also a complete explanation of the Fedders unit air conditioner division's cooperative advertising plan.

This plan provides that the manufacturer and distributor will each allow \$4 per unit for cooperative advertising, provided the dealer spends a total of \$16 per unit on such advertising.

Advertising is allowed only in English language newspapers (classified advertising not eligible), billboards, radio, and television. Other media must have prior approval from Fedders. Some sales promotional materials and other sales aids are eligible.

All such advertising used must be Fedders prepared advertising or have the prior approval of the manufacturer or distributor. When Fedders air conditioners are advertised with other products, the advertising allowance will be granted only on the space used by the Fedders copy and picture. If a competing product appears in the same advertisement, no credit at all will be given.

Another tool provided for the distributor salesman is a little booklet entitled "If I Were a Fedders Room Air Conditioner Dealer. . . ." The



WINDOW DRESSING—This picture in full color is used to dress up a specifications sheet on the Fedders WH 16, 1/2-hp. window air conditioner. It is part of the 22-piece "Spotlight" promotion the company is backing this spring.

book tells in brief paragraphs and accompanying drawings what steps the dealer should take to sell more units.

These include installing a unit in his own home, displaying the line prominently in his store, identifying himself as a Fedders dealer, learn all about the line's features, advertise, promote, and follow up leads, use salesmen's contests, use the user, conduct "comfort" parties, contact known prospects, and follow up all tips.

These pieces are available to the dealer, too, and in addition, he is offered the following:

A floor display piece, rectangular and circular signs, decal, overwire banners, blue silk wall banner, three window banners, four-color newspaper broadside, a lithographed counter or window display, set of three two-color window streamers, full color specification sheets with outstanding pictures of interior decorations centering around the room air conditioner, two full line folders—one for direct mail use, and "executive" folder, "medical man" enclosure, newspaper advertisement mats, radio spot announcements, telephone sales solicitation sheet, "60-Second Sales Dramas" for floor selling, and a lapel button for retail salesmen.

In addition Fedders offers a cooperative buying match folder deal, whereby the dealer can have his name imprinted on match folders bearing Fedders advertising at a special low price.

Of particular interest in the dealer's portion of the kit are the direct selling aids. The telephone sales solicitation sheet, for instance, provided these practical tips:

"Survey your neighborhood. Make a list of all the businessmen (doctors, lawyers, etc.) you know—customers or otherwise.

"Now 'phone each one at his office. Ask him if his office is air conditioned. Ask him how many times he wished he could 'beat the heat,' work at top efficiency even when it's 90° and above outside.

"Build up a curiosity in your prospect's mind as to what you are driving at. Then give him the sell!"

A mailing piece directed at medical men offers this teaser: "Why 50,000 medical men will install air conditioners this year." Inside the folder explains through testimonials "why room air conditioners" and then through a series of statements "why Fedders."

A similar piece directed at executives uses a cartoon of a flustered executive and this statement: "So Many Executives . . . after sweating it out during hot summers year after year . . .", to get the reader to open the folder.

Then it completes the sentence on the inside this way: ". . . have in-



BEFORE AND AFTER—Graphic illustrations of what air conditioning can mean are part of a direct-mail piece for use by dealers.



APPEAL TO "BOSS"—One of three pictures in a mailing piece to executives showing them how to work more efficiently.

stalled a room air conditioner in their office. . . . And . . . have been so happy, pleased, and tickled with the result that they have installed (them) throughout their plants."

The reader sees three office installation pictures and reads a description of the benefits an air conditioner will bring him.

Another direct-mail piece, a 12-page booklet with a glossy, full-color cover, tells the complete story. It contains testimonials, a description of the line with the types of installations each unit is designed for, a set of four pictures with brief text on how the units are manufactured, and a parts identification chart.

There are three pieces in the "4 Aces" mailing campaign. Each bears a cartoon and teaser message on the cover.

Inside are contrasting photographs, one depicting discomfort from the heat b.f. (before Fedders) and satisfying comfort a.f. (after Fedders).

Text carries out the theme established on the cover and leads to a return self-mailer.

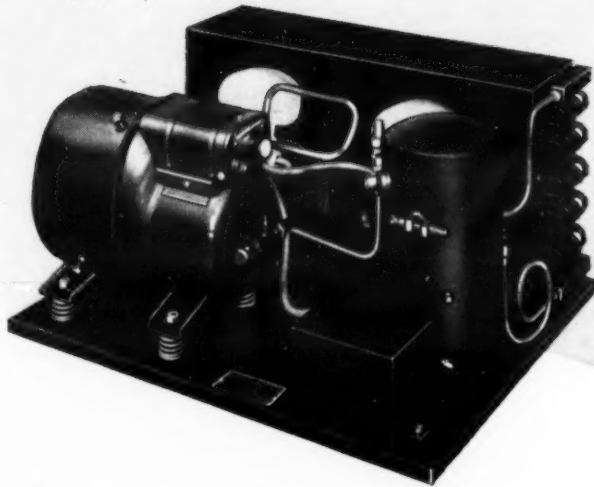
And Now

... SERIES 99

MORE OF THE NEW

Servel

MODELS FOR '51



Rugged, Versatile Dual-Use 1 H.P. Steel Case Supermetic Condensing Units with a full 5-year factory warranty

Like their smaller 1/2 H.P. sister unit recently announced — Series 99 — the new sealed steel case, twin cylinder Supermetic Air-Cooled or Water-Cooled Models are equally adapted for either medium or low temperature applications. Quick change of refrigerant (Freon 12 for medium — Freon 22 for low) and other easy-to-make minor adjustments are all that is needed to switch these remarkable condensing units from medium to low temperature or vice versa.

New engineering — more compact — increased capacity — spring-mounted power unit — quieter — less vibration. With trouble-free performance assured by Servel's liberalized 5-year Factory Warranty.

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up to 3 H.P.

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about these new models

Mail the coupon today . . .

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Models for every Commercial refrigeration
and air-conditioning use . . . 1/5 to 5 H.P.

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ELECTRIC REFRIGERATION DIVISION
DEPT. A-43 EVANSVILLE 20, IND.
Send complete information about new 1/2 H.P. and 1 H.P. Supermetic Steel Case Dual-Use Units and the 5-Year Factory Warranty.

NAME (personal) _____
TITLE _____
COMPANY _____
CITY _____ ZONE _____ STATE _____

SALES OPPORTUNITY

Nationally known Mid-West manufacturer, now expanding sales department, has opening for 2 sales representatives in Chicago headquarters for Illinois, Wisconsin, Minnesota, Missouri, Kansas, North and South Dakota, Iowa and Nebraska. Also 2 men in New York head-

quarters for New York and New England. Refrigeration background required, knowledge of truck body building, fixture manufacturing and jobber business desirable. Salary, expense and bonus. Include picture and complete qualifications in first letter.

WRITE BOX 3712, AIR CONDITIONING & REFRIGERATION NEWS

Air Conditioners In the Desert

California Dealer Finds Evaporative Coolers Aren't Always Sufficient In Sacramento Valley

SACRAMENTO, Calif.—While the "dry heat" of the Sacramento valley might seem to make it ideal for evaporative or "desert cooler" type air conditioning, the J. N. Blair & Co. has found it a fertile field for mechanically refrigerated air conditioning.

Last year the Blair organization installed 12 central station systems and sold more than two carloads of Airtemp packaged units. These jobs included certain work for the military including a decompression chamber, and a 55-ton system for a supersonic training center building. A number of radar stations in the area have also been equipped with cooling systems.

Bert Baker of Blair & Co. does not consider "desert coolers" competition for packaged air conditioners and room coolers. "We try to sell our customers on the best system they can afford," he says, "and that usually means the sale of air conditioning."

As a case in point, Baker cited the example of a prospect engaged in the business of redeeming "trading stamps" for premiums of various kinds.

"When I discovered 32 customers in the place the morning I made my first call, I knew right away the store should have packaged air conditioning, and not depend upon a desert cooler," Baker said. "From the internal latent load created by all those people it would not be possible to maintain comfort conditions in any other way."

J. N. Blair & Co., does handle, however, the Comfort Air Washer, that is made in Dallas, Tex. This device depends upon passing air through an activated curtain of water, and does not have the usual "evaporating pad" found on desert coolers.

The residential air conditioning business has been excellent for Blair & Co., Baker reports. Some 10 new homes have been equipped with Airtemp "year-round" system, using Airtemp gas furnaces and three or five-ton "packaged conditioners."

Because most of these jobs have been in large homes, costing between \$30,000 and \$40,000, the number of 5-ton systems has been in the great majority. Now that the "ice is broken," Baker expects the residential market to expand rapidly.

Blair & Co. started a bonanza for the west coast air conditioning dealers when it sold the first conditioning system for a chinchilla farm last year. The original installation was made for Gilbert Brown, at Napa, Calif.

At a convention of chinchilla growers held early this year, Brown reported that the use of air conditioning had been of great benefit to his business and that, had he purchased the equipment sooner, he would have saved some \$3,000 worth

of animals that were lost during hot weather. As a direct result of this report quite a number of the chinchilla growers present went home and made an immediate purchase of air conditioning from nearby dealers.

In most cases room coolers have been found to be quite satisfactory for conditioning rooms where chinchilla hutchers are kept, as a drop of only 8° to 10° is all that is required to keep the animals in satisfactory condition. As the relative humidity is usually below 50% in this area, one 1-hp. room cooler will handle a considerable load.

After years of experimenting with dealers and commission salesmen, Baker now operates a "one man" air conditioning department. With the limited amount of business available throughout the territory, he has found this to be the most profitable method of operation.

This is not true of the commercial refrigeration and store equipment business, however. Baker has one man, R. G. Biggers, who devotes his full time to the sales of Ajax Electric Ice cream makers, which are made by Servel.

A complete service shop is maintained, and 12 men are employed in the sheet metal department. Originally engaged in the sale of ammonia refrigeration systems, the company still does some high pressure refrigeration work.

Ceiling Price Regulation Allows Fair Trade Pricing

WASHINGTON, D. C. — Wholesale and retailers whose ceiling prices on specific items under the General Ceiling Price Regulation are below prices fixed under state fair trade legislation may apply for permission to sell at fair trade price levels under certain conditions, the Office of Price Stabilization announced recently.

Provisions for such adjustments were made in a supplementary regulation to the General Ceiling Price Regulation, which became effective April 21, 1951 and is entitled "Adjustment of Ceiling Prices of Fair Trade Commodities."

Those seeking relief must apply to the OPS in Washington showing that their ceiling prices involved are below established fair trade prices or that they have been enjoined by a court from selling such items at less than fair trade prices.

They must also establish that the items were sold generally during the base period, Dec. 19, 1950, to Jan. 25, 1951, in their locality at prices no lower than the fair trade minimums.

Where these conditions exist, OPS may authorize an adjustment of the ceiling price to the minimum fair trade price.

Defense Dept. Appoints Specialists to Each Armed Service Procurement Office In Move To Aid Small Business

CHICAGO—Providing for maximum aid for American small business to participate in the re-arming program and at the same time for broadening the nation's industrial base of suppliers, the Munitions Board has adopted new procurement policies and expanded existing policies for the Department of Defense.

The action followed a series of meetings held with leaders of Defense Production Administration.

Outstanding in the program, as announced by John D. Small, chairman of the Munitions Board, are:

1. A directive that assigns small business specialists to each armed service procurement office throughout the country;

2. Affirmation of a policy calling for the maximum use of the nation's industrial capacities already available, with limited use of "certificates of necessity" for those cases where open industrial capacity is not available;

3. Agreement upon the payments of justifiable price differential in negotiated procurements to accomplish the objectives of broadening the industrial base of suppliers;

4. A fixed program of encouragement of subcontracting, and

5. A provision to divide many negotiated procurements into small lots to allow multiple awards.

In addition, the board action asked for a review of the armed services production allocation programs with a view toward increasing the number of sources and variety of classifica-

tions of industry from which supplies may be secured. In asking that subcontracting be greatly encouraged, it directed that each important negotiated purchase be carefully examined to determine the extent to which subcontracting could be encouraged or even required. The extent of such subcontracting, the board said, shall be considered as one of the factors in the negotiating and pricing of the prime contracts.

In directing that small business specialists be assigned in each armed service procurement office, the board said that these specialists will devote all of their efforts toward bringing small business concerns into the military production programs. They will also recommend portions of defense production which can be produced by small plants in each region. In addition, they will maintain liaison with other government agencies on behalf of small business, according to the board.

The Munitions Board in its action today outlined the duties and responsibilities of the small business specialists thus:

1. Handle small enterprises and their inquiries exclusively.

2. Plan inventories of the production facilities and capabilities of small plants for use by government buyers.

3. Discover suitable facilities that should be participating in the present procurement program.

4. Make a constant review of procurement plans to find orders that could be channeled to small firms to

prevent concentration of orders in the large enterprises.

5. Recommend suitable facilities to contracting officers in specific cases.

6. Recommend credit extension, priority help, loan of equipment, etc., needed to convert small plants to emergency production.

7. Assist in determining which contract orders can be filled by the small businessman.

8. Help small plants with their production problems and in fulfilling their contractual obligations. This help may also include recommendations to aid for financing, priorities, etc.

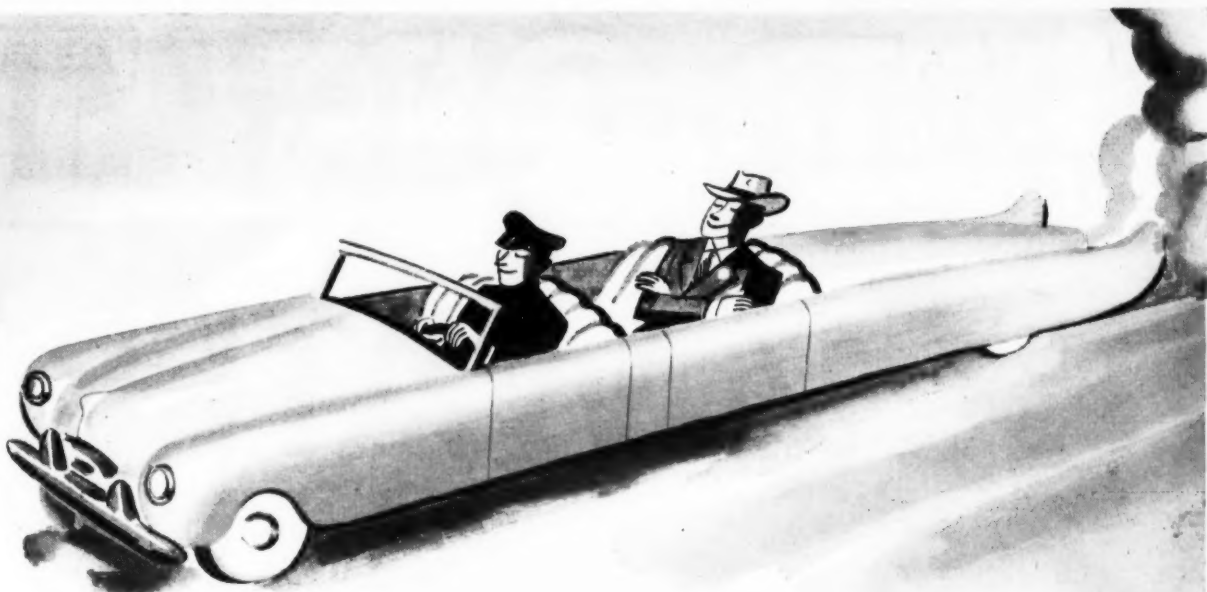
9. Help publicize the business opportunities in the subcontracting field and assist in training small business in obtaining subcontracts.

10. Set up objectives of the amount of production that can be secured reasonably for small enterprises, and work toward those goals.

The appointment of small business specialists will be made by the heads of the various procurement offices. They are to be drawn wherever possible from the ranks of small businessmen.

Air Cooled Food Market Opens

MEMPHIS — Air conditioned, the Charley Peri Food Mart has just opened for business at 2597 Central, with Leon Peri as manager. Air conditioning equipment was installed by Memphis Refrigeration Co.



Ed Jones is Riding in a Brand New Car—
because TYPHOON makes sure its dealers make money in
AIR CONDITIONING!

There's money in air conditioning—and Typhoon dealers are making it. They get the business, and they get the price! Because Typhoon has a sure-fire plan that's just about what the doctor ordered for healthy air conditioning profits...

TYPHOON brings you the most complete line of units in the quick-profit range — 1½-2-3-5-7½-8-10-15 and 20 tons. There's a size for every job!

TYPHOON units are ruggedly engineered—minimum maintenance, maximum profits and good will.

TYPHOON district managers give you 100% sales co-operation, with practical in-the-field training for your sales force.

TYPHOON delivers air conditioning at the lowest dollar cost per ton capacity—value that means full markup for you.

TYPHOON units are backed by 42 years of experience in cooling America... and by an advertising and promotion program that pulls a steady flow of leads for you.

Want to know about the finest dealer setup in the business? Write us today.



TYPHOON AIR CONDITIONING CO., INC.

794 Union Street, Brooklyn, New York

names of actual Typhoon dealers on request.

*Lovely to Look at...
So Wonderful to Own*

THE BEN-HUR FAMILY freezer is for welcome meal variety. Avoids meal-monotony, and food-cost savings help pay for the freezer, too.

Important sales-clincher for Ben-Hur dealers is the copyrighted "Let's Prove It" form, an easy and sure way to prove exact food-cost savings for any family. Speeds up your freezer sales and profits. Write for details.

12.5 cubic foot size, holds up to 625 lbs. Others: 8.5, 16, 20 cubic foot.

BEN-HUR MFG. CO.

Dept. AC — 634 E. Keefe Avenue, Milwaukee 12, Wisconsin

BEN-HUR FARM and HOME FREEZERS

HEALTHFUL LIVING THROUGH FROZEN FOODS

ONE LA CROSSE PRODUCT SELLS ANOTHER

ECONOMY PRE COOLER

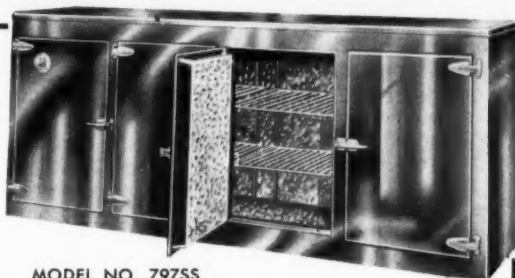


MODEL NO. 277

Compact and convenient—designed to cool 12 cases of bottles and pre cool 3 half barrels . . . attractively finished in black or stainless steel . . . has four adjustable partitions in bottle compartment . . . remote or complete electric models . . . built in the LA CROSSE tradition of finer workmanship.

DE LUXE PRE COOLER

The fresh styling and spacious storage room make this 4 keg pre cooler the favorite . . . beautifully finished in black or stainless steel . . . remote or complete electric models . . . with or without shelves . . . another reason why LA CROSSE is the line that repeats again and again.



MODEL NO. 797SS

LA CROSSE COOLER CO.

2801 Losey Blvd. So.

La Crosse, Wisconsin

Export Representatives: Melvin Pine & Co.

80 Broad St., New York, N. Y.

Cable address: Eximport

CMP Effective July 1--

(Concluded from Page 1, Column 5) products not covered by the CMP, which at present include all consumer durables, will have to compete in the open market for their supplies of steel, aluminum, and copper.

The Controlled Materials Plan, based on the one used during World War II is, according to NPA, a tested method for authorizing and assuring the production of defense and defense-supporting items.

With CMP, NPA will tell producers what the government has to have, it will furnish the timetable for getting things done; and it will give producers the authority to carry out the program.

CMP PROVIDES PRODUCTION SCHEDULE FOR MATERIALS

This authority gives the manufacturer of defense items an authorized production schedule to obtain and use controlled materials and a preference rating on other materials and components needed to finish the job.

"The authorization or allotment of steel, copper, or aluminum under the CMP is not a hunting license," the NPA said, "it is a cashier's check on the known supply."

For the time being, NPA declared, the CMP will be limited to defense production and to a relatively few special programs for production of vitally needed defense supporting items.

Such production will not require the whole supply of basic controlled materials. In fact, NPA asserted,

there will be a substantial balance available for non-defense production.

A rough balance between supply and demand for the left-over materials will be preserved by continuing to use other NPA powers such as the "M" or limitation orders to reduce less essential civilian production and assure that a proportionate amount of materials will be available for civilian business, large and small, the agency said.

PRODUCTS OF TWO TYPES

As in World War II, products programmed under the CMP fall into two categories: "A" products and "B" products.

In general, "A" products are those where the most convenient method of production authorization is vertical, such as products made to specification on government order. Producers of "A" products will get their production authorizations and material allotments from their customers.

Thus a government agency ordering an "A" product would give a production authorization and materials allotment to the prime contractor. The prime contractor would pass these on to the various subcontractors as needed. The latter in turn would pass them on, if necessary, to other subcontractors doing work for them.

'B' LIST FOR CIVILIAN USE

The "B" list programs will include civilian type products, industrial machinery and equipment, and components where it is most practicable to furnish authorizations directly to the producer. Thus, producers of "B" products will obtain their authorizations and allotments from their NPA industry division.

The official "B" list is expected to be issued next month.

It is planned that after the first quarter of operation, CMP will be decentralized so that producers can apply to their local district offices for authorizations and allotments.

According to NPA, the Controlled Materials Plan has the advantage of minimizing the need for centralized planning and supervision by closely following the normal "chain of command" in industry. A major share of the responsibility for getting out the necessary production is left to industry.

HOW IT WORKS

It will be up to the producer with a tank contract, for example, to allot controlled materials to his subcontractors and schedule production so that all the thousands of parts and components that make up a tank are ready on time and in the right quantities.

The exception is certain common components which are in such great demand that special programs will be devised by NPA to assure their availability.

The plan, NPA admits, is no cure-all. It cannot itself increase the total supply of steel, copper, or aluminum and it cannot eliminate all hardships throughout industry. It is no substitute for the enterprise and ingenuity of the businessman, the NPA declared.

While a great many details about how the plan will work are not yet known, producers can look forward to receiving a great deal of clarification during the next month, thus giving them plenty of opportunity to adjust to CMP before it goes into effect on July 1.

Southwestern Co. Changes Name

DALLAS—Name of The Southwestern Co., Inc., distributor of Philco and other appliances, has been changed to Medaris Co., Inc., it was announced by W. G. Medaris, president. Policies of the company and its officers remain unchanged.



C. T. LAWSON (right), vice president in charge of Kelvinator sales, congratulates H. B. Price, Jr. (center) of Norfolk, Va., and Mort F. Farr (left) of Upper Darby, Pa. at Brand Names Day ceremonies in New York City. Price received a plaque honoring his store as "Electrical Appliance Store Retailer of the year," and Farr received a certificate of distinction as a runner-up.

H. B. Price Takes Top Honors for 1951

Brand Name Promotion

NEW YORK CITY—H. B. Price, Jr. of Norfolk, Va. was named "Electrical Appliance Store Retailer of the Year," by Brand Names Foundation at recent ceremonies.

Three other appliance retailers received certificates of distinction for leadership in the promotion of regionally and nationally advertised brands during 1950. They were Mort F. Farr, Upper Darby, Pa.; Clarence M. Davidson, Davidson & Co., Inc., Miami, Fla.; and Lorin Levy, The Radio Center, New Orleans.

Price is a vice president of the National Appliance and Radio Dealers Association; Farr is the president of Narda; and Davidson and Levy are both Narda members.

Selection of the awards was made by the organization's Retail Advisory Committee, composed of 22 merchants. Appliance retailer representative was Vergal Bourland of Vergal Bourland's Home Appliances, Inc., Ft. Worth, Tex.

Furniture stores that were honored were Adam Glass & Co., Mobile, Ala.; Cannons Furniture, Owensboro, Ky.; H. Cohen Furniture Co., Inc., Nashville, Tenn.; Miller Bros. Co., Wilmington, Del.; and Wolpert Furniture Co., Miami, Fla.

Hardware stores so honored were: Otto Herrmann, Inc., Glendale, L. I., N. Y.; W. E. Aubuchon Co., Inc., Fitchburg, Mass.; and Vonnegut Hardware Co., Indianapolis, Ind.

Narda Asks Extension --

(Concluded from Page 1, Column 2) at the same deadline as those initially included (April 30).

"Frequently their inventories include complex stocks of parts, tubes, and small appliances for which development of pricing charts requires much time and clerical assistance.

"On behalf of these merchants, we urge you to grant a 30-day extension for the pricing of items under Amendment 2.

"Although this amendment was dated April 5, many retailers were not acquainted with it until some time later," Farr said, "and there is a great deal of confusion among dealers about such matters as the inclusion of federal excise tax and warranty charges in net cost.

"For these reasons, we consider our request a fair one. We are confident that the extension of the deadline will be granted."

FOR REFRIGERATION AT ITS *Very Best*

SEE THE LIFETIME **P-H LINE** WITH GRAD-U-MATIC AIR CONDITIONING

Reach-In Refrigerators
Pass-Thru Refrigerators
Dairy-Delicatessen Cases
Display Cases—Double Duty
Dough Retarders
Dry Beverage Coolers
Florist Refrigerators

Underwriters' Approved

PUFFER-HUBBARD
MANUFACTURING COMPANY
GRAND HAVEN, MICH.



DON'T

Use WATER!

use

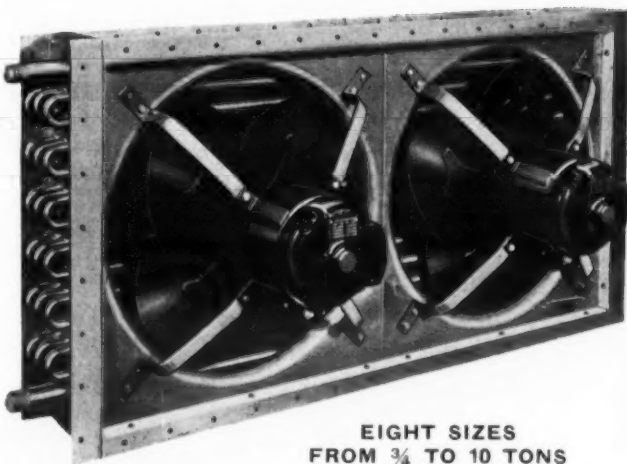
UNICON

SELF-CONTAINED, REMOTE TYPE
AIR-COOLED CONDENSER

by **KRAMER**

When to Use the UNICON . . .

1. To eliminate hot compressor rooms.
2. Where there is no water at all.
3. Where water is too expensive.
4. Where there is a sewage problem.
5. Where extra condenser capacity is required in an existing system.
6. For combination air-and-water cooled systems in an existing water cooled system.



EIGHT SIZES
FROM ¾ TO 10 TONS

Send for Bulletin No. U-177

KRAMER TRENTON CO.
Trenton 5, N. J.

THERMOBANK-COOLMASTER-RADIAL UNITS
PANEL UNITS-CUBERS-FINNED COILS-
BARE TUBE COILS-HEAT INTERCHANGERS
CONDENSERS Air Cooled, Water Cooled, Evaporative
WATER COOLING EVAPORATORS
BLAST COOLING COILS-BLAST HEATING COILS.

Is This the Answer?

Nargus Book Discusses Conversion To Self-Service Meats To Increase Volume, Lower Overhead Costs

CHICAGO—The meat department should represent at least 25% of the total dollar volume of the food store, and if this figure is not being realized, it may be that conversion to self-service can improve the ratio.

This opinion is put forth in "Self-Service Meats—Is It the Answer?" a recently published book of the National Association of Retail Grocers. The book is designed to help meat department managers increase volume to reduce overhead costs per pound of product handled, as well as to help managers handle rush-hour business more easily.

Clifford G. Bowes, director of Nargus Meat Division, is the author of "Self-Service Meats." All the ideas suggested in the book are being used by managers who find them practical in solving their particular problems, he says.

According to Bowes, self-service is here to stay because it appeals to homemakers. The number of markets where meats are sold on a self-service basis has been growing and will continue to grow. The Nargus book endeavors to help the retailer avoid many errors and pitfalls of this type of service.

"One of the principal advantages of self-service," the author points out, "is that it allows increase in volume to be handled more easily. In most meat departments, there are alternating busy and quiet periods. When sales come in spurts, the operating cost per pound of product is increased, for expenses continue to accumulate during hours of the day when little or no product is sold. The average cost per pound of product can often be reduced by conversion to self-service, for it permits better utilization of facilities."

Using numerous illustrations, the book describes in detail efficient techniques in self-service meats—from the cutting room to the display counter. It includes a discussion of proper wrapping materials and methods of packaging all kinds of meats from fancy cuts to ready-to-serve meats.

It treats of such topics as temperature control, dating and coding of packages, analyzing expenses, and the sales volume needed for successful self-service. An appendix lists the cost of equipment and supplies.

"Today's successful manager," the author says, "computes all prices and operating costs on the basis of cents per pound of product handled, rather than on a percentage basis. Cents per pound pricing gives the retailer a system of cost analysis set up in such a way that sources of trouble can be spotted each week if they develop. If a cut of meat is not carrying its share of the expense, this fact is known immediately."

The book also carries advice to the effect that the time has not yet come for some managers to convert to self-service. "The retailer doing an exceptional volume on a service basis, and showing a consistent profit, will

no doubt want to think twice before converting," the author says.

"If in doubt, it might be practical to set up partial self-service, with the idea of converting fully at some later date. Partial self-service has its drawbacks but can be practical temporarily to relieve a bottleneck or handle an overflow from the regular service counter."

The author suggests that the retailer contemplating self-service should visit as many markets as possible before taking the final step. Errors and "headaches" can be greatly reduced by finding out about these sources of trouble ahead of time.

The book may be obtained at Nargus headquarters office, 360 N. Michigan Ave., Chicago. The price is \$1.50.

Horsemeat Used as Dog Food Kept Handy In Self-Serve Freezer

AURORA, Colo.—A self-service food freezer located at the right side of the driveway leading into its building is selling an average of 400 lbs. of frozen horsemeat a week for Aurora Fuel & Feed Co. here and has stimulated sales of other items, according to Finis Dobbs, owner of the company.

The custom-built refrigerator is divided into four compartments which are stocked with horsemeat in cuts ranging from one to 10 lbs. It is mounted on four wooden skids which raise it a foot above the floor level.

To focus attention on the freezer, Dobbs posts photographs of prize-winning dogs and customers' "pooches" on a bulletin board along the back of the all-white unit. As each new customer comes in, Dobbs asks for a picture of his dog to put on the board.

"We find that once we post a snapshot of a pet on the bulletin board, the owner becomes a consistent customer and often will bring friends and acquaintances around to see the picture," Dobbs said.

The freezer replaced a small refrigerated box which Dobbs installed on an experimental basis after some customers commented that their dogs preferred horsemeat to the packaged dry foods sold by the company's pet supply department.

Dobbs found most customers willing to try feeding their dogs horsemeat, when he suggested it. When the pets responded favorably to this kind of food, horsemeat sales grew steadily.

So did sales of other items carried by the firm—such as veterinary supplies, harnesses, leashes, and feeding bowls—as the availability of frozen horsemeat attracted additional customers.

ASHVE Meeting To Be Held In Portland, Ore., July 2-4

PORTLAND, Ore.—Inspection and sight-seeing trips and other entertainment features arranged for the semi-annual meeting of the American Society of Heating & Ventilating Engineers to be held here July 2 to 4 have been announced by Bert W. Farnes, general chairman of the committee on arrangements.

There will be nine technical papers presented at the three morning sessions, subjects of which are to be announced soon by E. R. Queer, professor of engineering research, Pennsylvania State college.

The advance group will get under way Sunday, July 1, with council and committee meetings. Those without committee work will be taken on a sight-seeing tour.

The Research Golf Tournament is planned for Monday afternoon and for non-players there will be a trip along the Columbia River and a visit to Multnomah Falls. A Hawaiian buffet dinner party with special entertainment and dancing will take place in the evening.

While the Tuesday morning technical session is being held, the ladies will enjoy a visit to the International Rose Gardens. A visit to the Grotto and Timberline Lodge will be followed by a salmon bake.

An inspection tour of the country's largest heat pump installation and a Mollala Buckaroo will follow the technical session on Wednesday morning. The Buckaroo Parade will start at 10:30 a.m., and the main events will be held in the afternoon. The semi-annual banquet will conclude the City of Roses meeting.

Theme of NAED Meeting

Role of Electrical Distributor In Preparedness Program To Be Discussed In Atlantic City

NEW YORK CITY—The integration and operation of the electrical distributor in the preparedness program will be the theme of the 43rd annual convention of the National Association of Electrical Distributors, it has been reported by Charles G. Pyle, who is executive director of N.A.E.D.

The convention, which opens on May 21 at Atlantic City, N. J., and ends May 25, will be held in the Ambassador and Chelsea hotels with meetings in the Westminster Hall of the Chelsea.

Prominent executives from industry, officials from NPA, OPS, and other government agencies will participate in a program designed to guide the course of the electrical distributor in the preparedness economy.

Among the speakers scheduled are John M. Otter, vice president and general sales manager of the Philco Corp.; L. D. Shank, chief of the Electrical Products Section, Building Materials Div. of the Department of Commerce Facilities & Construction Bureau.

Charles A. Morrow, vice president in charge of sales, Mullins Mfg. Co.; George F. Hessler, vice president, Graybar Electric Co., Inc.; and Dr. W. H. Alexander, pastor of the First Christian Church of Oklahoma City.

Special features will be a presentation of the Electric Housewares Gift

Campaign prepared and presented by the Electric Housewares Section of Nema. An award will be made at the general session on Wednesday, May 23, to the Junior Achievement company producing the best electrical product and the association's scholarships to Junior Achievement members will also be announced, according to Pyle.

Approximately 200 manufacturer conference booths will be located on the lounge floor of the Ambassador hotel.

Guide to Military Buying Revised by Government

WASHINGTON, D. C.—The Central Military Procurement Information Office of the Munitions Board has revised the "Index of Military Purchasing Offices: A Guide to Industry In Selling the Military Departments."

The guide lists all the procurement items assigned to each of the military departments for combined buying, together with the location of Army, Navy, and Air Force offices responsible for the purchasing of each item.

Copies are available from the Industrial Services Branch, Office of the Secretary of Defense, The Pentagon, Washington, D. C., upon request.

15 Built-In Salesmen!

THE 15-WAYS-BETTER FEATURES OF YORK Room Air Conditioners



★ COMPLETELY HERMETICALLY SEALED refrigerating system. Not semi-sealed with nuts, bolts, gaskets. Flame-Sealed—light-bulb-tight—leak-tight, air-tight, tamper-proof. So trouble-free, it's backed by

★ YORK'S FIVE-YEAR WARRANTY!



★ 2-TO-1 BEAUTY! Decorator-styled cabinets, decorator-tested colors.

★ 3-TO-1 COMFORT! Output 3 or 4 ways at once.

★ DRAFT-FREE CIRCULATION! Big Turbo-Impeller.

★ 7-TIMES-CLEAN! 7-ply filters.



★ QUICKER cool-comfort with York's Cooling Maze Coil.

★ QUIETER! Cooling unit cushioned, cabinet insulated.

★ TRIPLE INSULATION! Thick acoustic and heat-cold blankets, plus moisture seal.



★ EXCESS MOISTURE DIFFUSED—moisture kept away from fan motor and compressor mechanism and diffused outdoors.

★ YEAR ROUND air cleaning, circulation, plus hot-weather cooling and dehumidifying.

★ FINGERTIP CONTROLS!



★ PUMP-OUT clears stale air, smoke and cooking odors in seconds.

★ ONE HUSKY motor saves current—delivers cool dry air—removes hot, moist air.

★ REFRIGERANT - COOLED compressor saves current and trouble!



MODEL 13—½ HP



MODEL 24 ¾ HP



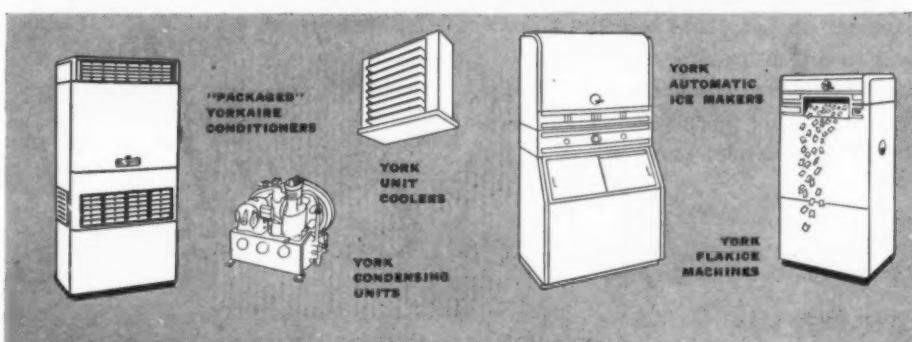
MODEL 41 1 HP



The big advances come from

YORK

Headquarters for—Refrigeration and Air Conditioning



MODEL 151 1½ hp

MODEL 201 2 hp

Step-Matic Control Cuts Costs by turning on only one of the Twin Hermetically Sealed Refrigerating Systems whenever little cooling is needed—dehumidifies on "muggy" days without excessive cooling. This York model is adaptable to multiple spaces with minimum ductwork.

"WE MAKE IT!"

- THE RIGHT DISPLAY
- AT THE RIGHT PRICE
- FOR EVERY FOOD REFRIGERATION NEED

Federal
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complete line

ILLUSTRATED, SELF-SERVE FRESH MEAT, STANDARD LENGTH, EASILY ADAPTED TO CONTINUOUS.



We are experienced manufacturers of displays and refrigerators . . . for every food refrigeration need.

The FEDERAL LINE is a quality line . . . measuring up, in every detail, to highest standards. There are over 50 models, and our representatives invite your inquiries.

Representatives in all principal cities.

FEDERAL REFRIGERATOR MANUFACTURING CO.
WAUKESHA, WISCONSIN

Federal
REFRIGERATORS

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)
must you have 10 grand?"

"I gotta have it to hold my head up in perlite sassiety," she explained. "There I was tonight—and there I'll be all through the Opera Season—sittin' between the wives of the Yankees and Giants managers. Mrs. Y... is dripping in mink; Mrs. G... is swathed in ermine. And here am I, in an old cloth coat, just like a minor leaguer!"

Somehow, that story reminds us of the three minor league baseball players (they were with Terre Haute in the Three-I League) who were married in a triple wedding ceremony. Jovially they placed bets among themselves as to which would produce the first son.

Years passed, and none of the trio was blessed with issue—male or female.

Eventually, one of these ball-players was drafted by Connie Mack, and took his wife to the Athletics' Florida spring training camp. To their mutual surprise, the next winter this hitherto-barren wife birthed a nine-pound boy.

Following year the second minor-leaguer was invited to a spring-training camp by the Boston Red Sox. He, too, took his wife to Florida, where she sat and knitted while he per-

spired. And she, also, when the snows were on the ground, delivered a handsome boy-baby.

Re-unioning in Terre Haute that Christmas with their erstwhile chum—who was then catching for Peoria—they commiserated with him, and decided to do something about his failure in the fatherhood business.

"Look, old friend," they said. "You're still in the minors. And you are still childless. Wouldn't you like to be happy like us? Okay. We'll lend you \$3,000 bucks. Send your wife to Florida. It's wonderful down there. She'll come back a different woman. And then maybe you, too, will become a proud father."

The Minor Leaguer held his head for awhile, and then demurred.

"That \$3,000 loan is a lotta dough," he groaned. "Wouldn't it be cheaper to bring that Florida so-and-so to Terre Haute?"

Yarns from Leo

During the Prohibition Era drinks were easily obtainable in major league cities during the regular baseball season. But on the spring training tours, you "hadda know sum-buddy" if you were thirsty.

One Spring during the Dry Era the Detroit Tigers went through the motions of an exhibition game with the Chattanooga Lookouts. It was a hot afternoon, and after Leo Macdonnell and the Chattanooga sportswriter had filed their stories, Brother Macdonnell gasped:

"Man! Would I love a drink!"

"Fella," soothed the Chattanooga, "I gotta git home. But I can fix you up right pert. You jes' come along with me, sir. . . ."

Leo did. The Tennessee sportswriter flagged a police scoutcar, introduced his new friend, and ordered:

"Take Mistuh Macdonnell out to the nearest still. He's a-cravin' foah a drink."

The cops whizzed through stoplights and zinged onward into the Tennessee foothills. Abruptly they braked their scoutcar, and trained their spotlight upon a hummock. Out came a bearded mountaineer with a corn-cob-stoppered jug. Calmly and confidently he lifted the heavy jug of moonshine up, preparatory to handing it over—and then he spied Leo.

The moonshiner retreated to a safe distance.

"You cops are all right," he growled, suspiciously, "but I hain't seen that feller in the back seat afore."

Protesting that Leo was no Revenooer, the Chattanooga policemen eventually provided the Detroit sportswriter with a tonsils-assuaging drink.

Reporters who accompany baseball clubs on their sun-following spring junkets expect to bunk together with peers. It sometimes happens, though, that a veteran sportswriter must share hotel rooms and Pullman compartments with a raw rookie reporter. And that's a Fate Worse Than Death, 'tis said.

It happened to Leo in 1946. Throughout the southern exhibition tour he had to put up with a breathless young cub who feared that he'd be scooped any minute. Every night he'd wake up Leo and demand:

"What's new?"

Leo always grunted, disgustedly: "Nothing. Turn in, go to sleep, and let me alone."

The passer-on of this tale got plenty tired of this routine. And so, when the South-touring baseball players and writers arrived in Atlanta, Leo got his revenge. Everybody in the party was quartered in the Atlanta Biltmore hotel—a wonderful hostelry which is noted equally for its succulent meals and its remarkably expansive accommodations. Here was a perfect setup for a practical joke.

Leo went out and bought a sway-backed old horse. He transported it via the freight elevator into the suite he shared with the annoying, wet-behind-the-ears cub reporter. Next, he pushed this tired old horse into the spacious bathroom, and closed the door.

Ten minutes later, his roommate burst in and cried: "What's new, Leo?"

"Oh, nothing much," yawned the veteran, "except that I've snatched the winner of tomorrow's handicap race for an exclusive interview. Er . . . he's in the bathroom."

Ruth's Successor?

"That guy can hit a baseball farther than anybody in the game," Ted Williams once said of Pat Seerey, "and I bar nobody."

At the time Williams made that remark, Seerey was setting new American League strikeout records.

Transferred from the Cleveland Indians to the Chicago White Sox in the middle of the 1948 season, Seerey had no regrets over this untoward trade, even though his former team seemed like a cinch to get into the 1948 Series. In Chicago, Pat played regularly for awhile. In Cleveland he'd sat on the bench.

In Philadelphia, soon after he had been traded to the White Sox, Seerey batted his fourth home run of the game into the left-field stands. This quartet of homers tied the American League record. Although the three previous homers were mighty blows, the last one barely cleared the barrier.

"I was tired and couldn't put my power into that one," puffed Pat, when he arrived in the dugout.

"You were tired," mimicked ageless Luke Appling. "How the hell did you get so tired just walking around the bases all afternoon?"

The four homers bagged by Seerey in that game netted him an unexpected \$500 bonus, donated by Charley Ziebler, Philadelphia battery manufacturer.

Formerly an independent baseball promoter, Ziebler had inserted a notice in the Shibe Park program proffering a \$300 reward to the first player hitting three home runs in a single game, and \$500 for four homers.

Seerey collected the half-grand. It was at Shibe Park, too, that the famed Lou Gehrig bagged four home runs during one contest. Old-timers Bobby Lowe, Chuck Klein, and Ed Deleahanty are the only other major leaguers who have duplicated Seerey's feat.

Best-Remembered Homer

In the minds of many Detroiters the most dramatic home run of all

time was not Babe Ruth's fabulous feat in Chicago (when he pointed toward the bleachers—and then parked the next pitch 'way out there). Detroiters who were boys back in 1936 swear that the greatest home run of all was smashed out by "Goose" Goslin on a hot August Saturday of that year. Goslin, then at the trailing end of a long and honorable career in the majors, had won the 1935 World Series for Detroit with a last-minute single. He was a local hero, even though he wasn't acclaimed nationally.

"The Goose" was a great "money player." His batting average seldom was high, but he had a remarkable habit of winning games with timely hits.

On that particular Saturday afternoon, several thousand newsboys attended the game in a body, on Annie Oakleys. "Goose" was hitting only .212 at the time, and realized that he was almost through as a player. The kids didn't know it, though. He was still their favorite. First time he came to bat the newsboys roared out a "Yeah, Goose . . . Yeah, Goose."

Mr. Goslin struck out.

On his next time up, the loyal newsboys thundered out another chanted cheer. He tapped weakly to the infield. In the seventh inning he came to the plate again, and once more those thousands of future Detroit voters cheered him lustily. There was a man on base this time, too; and the boys knew that "Goose" seldom hit safely unless a baserunner could be scored.

Goslin let 'em down again with a pop fly.

Weary old "Goose" trudged out to right field, sadly nursing his "gone" legs, and wishing he were 10 years younger.

During the next two innings the visiting team scored two runs, the first markers of the game. Fortunately, Goslin didn't have to shag any flies.

It was the last half of the ninth inning when "Goose" faced the pitcher for the last time. He'd gone three for the horse collar, and the perspiring pitcher smiled a bit when he confronted the poor old veteran. Two runners were on base, and there were two outs registered on the scoreboard. This third out, the pitcher said to himself, should be a "soft touch." He eased up a bit, and "Goose" whiffed at two slow balls. At this tense moment (two strikes, no balls) Goslin left the batter's box to pick up some dirt and rub it on his sweating palms and on the bat handle. Spontaneously those thousands of newsboys screamed, in unison:

"Yeah, Goose. Home run!"

"Yeah, Goose. Home run!"

You've guessed it, reader. Old Man Goslin slammed the next pitch high into the bleachers—right into the laps of those kids—for a game-winning homer.

It was his last four-bagger in the major leagues, but by all odds the most satisfying. And today there are thousands of Detroit druggists, realtors, engineers, doctors, lawyers, salesmen, preachers, and Skid Row bums who remember that THRILL, and who wouldn't allow Cobb, Speaker, Ruth, Di Maggio, or anybody to nudge "Goose" Goslin off their all-time All-American baseball team.

Your No.1 DEMAND... the CONDENSER must be

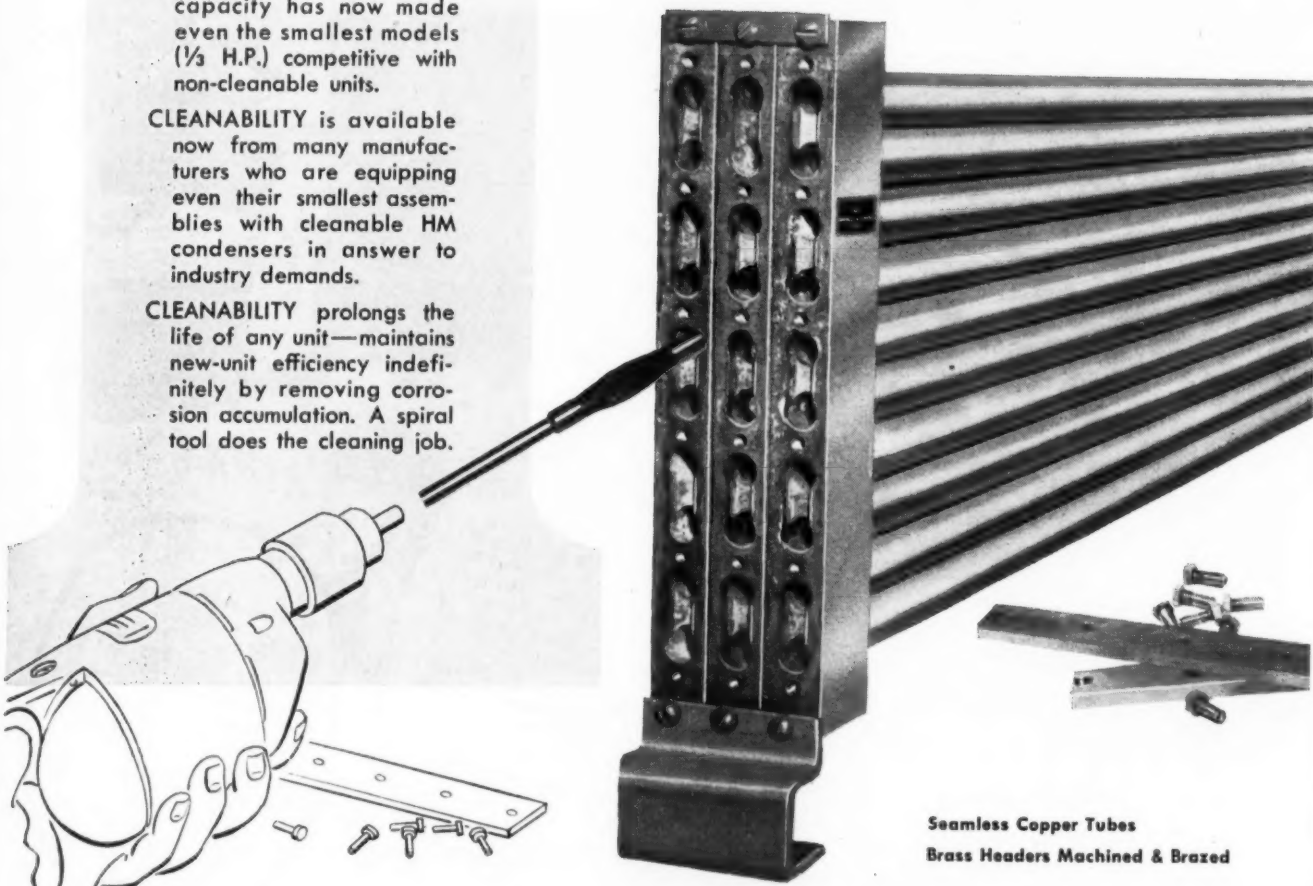
Because...

CLEANABILITY costs no more in the new HM condensers. Tremendous productive capacity has now made even the smallest models (1/2 H.P.) competitive with non-cleanable units.

CLEANABILITY is available now from many manufacturers who are equipping even their smallest assemblies with cleanable HM condensers in answer to industry demands.

CLEANABILITY prolongs the life of any unit—maintains new-unit efficiency indefinitely by removing corrosion accumulation. A spiral tool does the cleaning job.

CLEANABLE



Seamless Copper Tubes
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Why not insist that your next unit have a CLEANABLE water-cooled condenser?

Especially since leading manufacturers, one after the other, are recognizing the "must" advantages of accessibility to cleaning and are equipping their units accordingly.

They realize that initial purchase cost is no higher, and longer life and more economical performance are guaranteed. The CLEANABLE feature

enables you to recover new-unit efficiency and thus maintain 100% economical operation indefinitely.

In Halstead & Mitchell Cleanable Condensers, water tubes are accessible from both ends on all size models

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FINE LINE of BEVERAGE COOLERS

**Fast, efficient cooling
The work-horse of
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Sizes: 12, 22 and 32 case capacities
with self-contained units.
17, 27 and 37 case capacities
for remote installation.

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MANUFACTURERS OF THE FAMOUS VICTOR QUICKFREEZE

PRODUCTS CORPORATION • HAGERSTOWN, MD.

Aid to Locker Operators

OPS Amendment Reclassifies Farmers Who Have Slaughtering Done by Locker Plants

ELIZABETHTOWN, Pa.—A change in slaughter control that will aid locker plant slaughterers by reclassifying farmers who transfer less than 6,000 lbs. of meat per year to other people was recently issued by the Office of Price Stabilization.

The change was made after consultations between representatives of the National Frozen Food Locker Institute and officials of the Livestock and Meat Branch of the OPS, Robert L. Madeira, executive secretary of the institute, declared recently.

The change was promulgated in amendment 2 to Livestock and Meat Branch's distribution order no. 1.

Under the original order, locker plant slaughterers were required to segregate their farmer patrons for whom they do slaughtering into two classes. In one class were those who during 1950 had slaughtering performed only for their own consumption.

In the other class were those who had slaughtering performed for themselves and transferred meat to other people. For farmers in this class, the slaughterer was required to show how much meat was transferred and to whom.

According to Madeira, the difficulty arose in this second class. Almost every farmer transfers some meat when he has slaughtering performed, he noted. This meant that almost

every farmer had to be registered as a Class 2A slaughterer and had to have an establishment number.

Therefore, the locker plant slaughterer, on the one hand, could not do any slaughtering for a farmer unless he was registered and had a quota for the amount of meat he could transfer. On the other hand, he had no means of getting such information in order to register the farmer.

Amendment 2, brought about by NFLI intervention, provides that "if you are a resident operator of a farm on which you reside at least six months a year, and if, during the calendar year 1950, you transferred no more than 6,000 lbs. of meat resulting from your slaughter of livestock or the slaughter of livestock for you, you are a Class 3 slaughterer. The transfer of meat includes the selling, giving, exchanging, lending, delivering, or consigning of meat and also the placing or storing of meat in warehouses or locker plants."

It also provides that "no Class 1 or Class 2 slaughterer may slaughter livestock for you under this section unless you furnish to him a signed statement setting forth (1) the address of your farm; (2) that you are a resident operator of a farm on which you reside at least six months a year; (3) that during the calendar year 1950 you transferred no more than 6,000 lbs. of meat resulting from your slaughter of livestock or the slaughter of livestock for you; (4) a description of the livestock by species, number of head, and live weight; (5) that the transfer of all meat or any part of the meat will not make your total transfer of all meat in the current six months period, commencing with March 1 or September 1, exceed 3,000 lbs. or the amount you transferred during the corresponding six months period of 1949-50, whichever amount is lower.

"Furthermore, if any of the meat is to be transferred to persons acquiring it for resale, you must set forth in this statement the names and addresses of such persons and that you transferred meat to such persons in 1950."

Madiera explained that this change eliminates the problem for the locker slaughterer by redefining Class 3 slaughterers so as to include the farmers who formerly fell into Class 2A category.

This means that a farmer can still have slaughtered for him as much livestock as he wants for his own consumption provided he signs a certificate of eligibility. He can also have slaughtered for him as much livestock for transfer as he did in 1950 provided he signs a statement of eligibility. Such statements are to be kept on file by the locker operator.

Sunroc Co's. West Coast Office Has New Address

LOS ANGELES — Sunroc Co., manufacturer of electric water coolers and water purifiers, recently moved its West Coast offices from 2331 Westwood Blvd. to 12810 Venice Blvd., here, according to Paul H. Walter, western states sales manager.

Increased service facilities will enable Sunroc to more fully meet the needs of its customers.

Mailing address at the new location is: P. O. Box 12456, Los Angeles.

Profit Maker of the Month

GAS UNIT HEATER

Steel heat exchanger model shown provides top heating efficiency at low cost. Available in standard propeller fan, duct or blower styles. Automatic controls. Tested and approved by A.G.A. Send for Bulletin 23.

Yours Free! New fact-filled book on air conditioning—excellent sales tool to use with customers. Write today for "Practical Pointers."

usAIRco UNITED STATES AIR CONDITIONING CORPORATION
3308 Como Ave. S.E., Minneapolis 14, Minn.

Reco Gets Contract To Make Ice Plants for Army

PHILADELPHIA—Reco Products Division, Refrigeration Engineering Corp., was recently awarded an Army contract for the manufacture of 35 ice plants of one-ton daily capacity.

These are self-contained plants, refrigerated by means of a gasoline engine driven "Freon" condenser. The plants are skid mounted and shipped complete. The plants will be manufactured in the new Refrigeration Engineering Corp. plant at Emporia, Va., according to the company.

This is the second such contract which Refrigeration Engineering Corp. has had for the Army Engineers, company officials stated.

New Federal Market Stresses Frozen Foods, Self-Service

HAMBURG, N. Y.—Frozen foods comprise an important phase of the operation of the newly-opened Federal Market in the Hamburg Shopping Center.

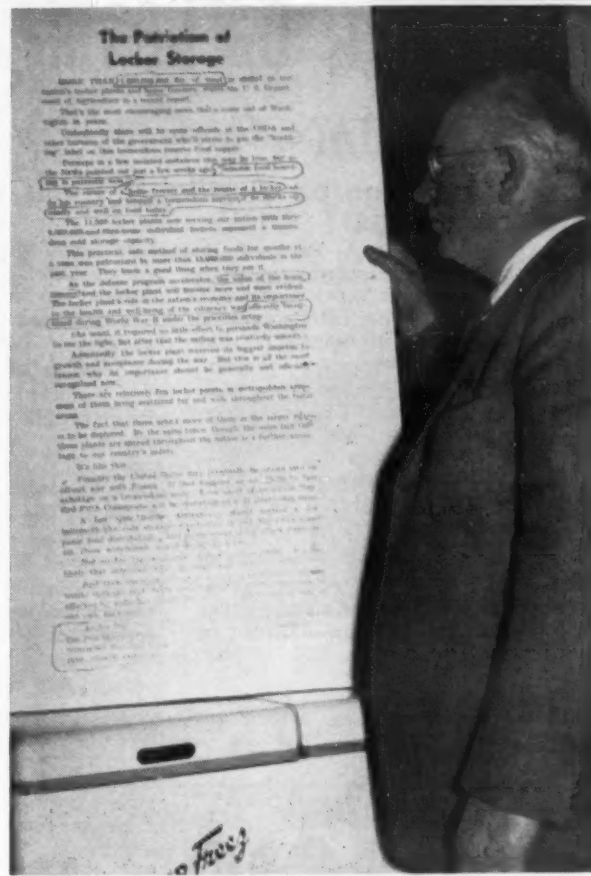
An entire side wall at the front of the store is given over to a large self-service frozen food case. Above the case is a sign reading: "Our frozen food department is the most complete in Hamburg."

The department is geared for self-service operation since it is set apart from the service section of the store. Customers are invited to make their own selections from the cases and then bring them to the service counter.

Keeping 'em Posted

Henry Colder Co., Milwaukee, Wis., often posts pertinent editorials from AIR CONDITIONING & REFRIGERATION NEWS for all its employees to see. The company is a distributor for Tyler store equipment, home freezers, and commercial refrigeration.

One such editorial from the Feb. 19 issue of the NEWS on the patriotism of locker storage interested the firm so much that it had it enlarged to 24-in. by 36-in. size. C. J. Kennedy, sales manager, is shown looking at the poster-size blow up. Note salient points are circled as attention-getters for members of the firm.



Electric Sales & Service Opens

AUGUSTA, Ga.—Electric Sales & Service Co., Atlanta, Ga., wholesale appliance distributor, has announced the opening of an Augusta office and warehouse. J. B. Wood will be sales manager for the Augusta area and H. H. Akin has been named manager of the new branch.

JUST ASK US

For "easy-to-get" product information... use coupon on "What's New" page.

Use Key No. for fastest service.

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COIL AND PAN COMBINATIONS

1. Copper-welded connections
2. Super-sensitive fins
3. 3/8" electro-tin-plated tubing
4. Mechanically molded fin-to-tube bond
5. Louvers of heavy aluminum alloy
6. Scientifically placed louvers for improved air circulation
7. Louvers temperature-equalized to prevent dripping
8. Adjustable pull hook hanger for easy installation and cleaning

Coils And Coil & Pan Combinations For 8 ft. Walk-In-Coolers

BOX SIZE	BTU/HR	SQ. FT. 15" TD	NO. COILS	COIL AND PAN COMBINATIONS			COILS ONLY		
				MODEL NO.	DIMENSIONS IN INCHES		MODEL NO.	DIMENSIONS IN INCHES	
					D W L			D W L	
5 x 4	2496	161	1	548P	13 24 46	C548	7 21 40		
5 x 5	3094	199	1	558P	13 27 48	C558	7 24 42		
6 x 4	3120	201	1	648P	13 24 54	C648	7 21 48		
6 x 5	3225	206	1	658P	10 1/2 38 57	C658	3 35 50		
6 x 6	4160	274	1	668P	13 32 54	C668	7 28 48		

Coils And Coil & Pan Combinations For 10 ft. Walk-In-Coolers

BOX SIZE	BTU/HR	SQ. FT. 15" TD	NO. COILS	COIL AND PAN COMBINATIONS			COILS ONLY		
				MODEL NO.	DIMENSIONS IN INCHES		MODEL NO.	DIMENSIONS IN INCHES	
					D W L			D W L	
5 x 4	2925	192	1	541P	13 35 40	C541	7 31 1/2 33		
5 x 5	3861	249	1	551P	13 35 47	C551	7 31 1/2 41		
6 x 4	3432	220	1	641P	13 24 58	C641	7 21 52		
6 x 5	3780	242	1	651P	13 24 57	C651	7 21 50		
6 x 6	4570	292	1	661P	13 32 58	C661	7 28 52		

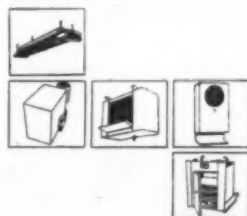
A complete range of standard sizes • Special sizes built to order

14 x 12	12075	614	2	1248P	10 1/2 32 135	C1248	3 28 128
14 x 14	12075	710	2	1448P	10 1/2 38 126	C1448	3 35 119
16 x 8	9240	535	2	1688P	10 1/2 24 154	C1688	3 21 148
16 x 10	10692	618	2	1608P	10 1/2 24 176	C1608	3 21 170
16 x 12	12636	783	2	1628P	10 1/2 24 176	C1628	3 21 170
16 x 14	14256	825	2	1648P	10 1/2 24 176	C1648	3 28 170

14 x 12	12480	777	2	1241P	10 1/2 32 134	C1241	3 1/2 28 128
14 x 14	13125	766	2	1441P	10 1/2 38 135	C1441	3 1/2 35 128
16 x 8	11544	716	2	1681P	10 1/2 24 162	C1681	3 1/2 21 154
16 x 10	11880	689	2	1611P	10 1/2 24 149	C1611	3 1/2 28 143

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It All Adds Up to This--

If There Is a Shortage of a Product, Retailers Should Concentrate Promotion on Available Items, Packard Tells EEI Home Service Advisors

By D. A. Packard, Household Sales Manager, Kelvinator Div., Nash-Kelvinator Corp.*

Most of you home service advisors came to Chicago with rather definite opinions regarding the appliance supply and demand situation in your territories. Now that you have been here two days and have had an opportunity to visit with your associates from other territories, it is probable that you have heard a lot of conflicting information.

I am quite sure that you have heard stories of high inventories and poor retail movement of some products in some areas, and I am further certain that you have heard a lot of discussions about the effect of gov-

ernment controls on the production of appliances and the shortages to be faced in the months ahead.

I wish it were possible for me to give you a quick, clear picture of the situation today, and of what we may expect for the balance of this year and 1952. I am not able to do so, nor do I know of any responsible individual in our industry who would at this time attempt to tell you definitely what is going to happen in the next year and a half.

Here are some of the factors that contribute to the present uncertain future.

You know, of course, that government controls on the usage of critical materials are going to reduce the

total number of major appliances produced in future months. While controls vary on different materials, there is one present ceiling that cannot be exceeded, regardless of the ability of manufacturers to work out the use of alternate materials for components of other than steel. That is the ceiling on steel itself.

The present steel order limits each manufacturer of major appliances to the use of 80% of the amount of steel he used in the production of the same type of appliances in the base period, the first 6 months of 1950.

Whether or not 80% of the base period production can be attained in the next quarter depends, not only on steel, but on each manufacturer's ability to secure or arrange a satisfactory substitution for the other more critical items such as aluminum, copper, nickel, cobalt, and so forth. The cutbacks under controls on these materials reduce usage to from 75% down to 50% of base period.

It remains to be seen how much credit restraints and excise taxes will affect sales as the active appliance selling season gets under way in the second quarter.

The third factor that has a very definite bearing on this picture is the factor of present inventories available in the hands of manufacturers, distributors, and retailers. Inventories, of course, are only high or low when measured by current sales rates.

Total Sales Are Still At High Level

For the past several years we have seen appliances of all types selling at record rates—in season and out. In our opinion, although some products have been faced with a seasonal decline in the last few months, total sales of all appliances are still at a high level.

However, from our viewpoint there seems to be a decided difference in the situation between the various appliances. At the present time from what we hear, television sets, for example, are in ample supply, while the demand, probably largely affected by the season, has dropped considerably, leaving the industry in a high inventory position.

You undoubtedly have heard a number of stories in recent weeks about high retail inventories in the household refrigeration industry. In this connection, however, you should understand that in the first quarter of each year it has always been customary for manufacturers and distributors to build up heavy inventories ahead of the peak refrigerator selling season.

Stocks Are Lower Than Normal

This year, because of fear of shortages, retailers have been buying well ahead of seasonal requirements. Manufacturer and distributor stocks are reported to be considerably lower than what they normally would be, or were in the spring of 1949.

Whether or not total inventories at all three points are ample, excessive, or short depends entirely on two things in the future:

1. The extent of the demand for refrigerators later in the spring.
2. The extent to which production will be further reduced from present levels.

MR. DISTRIBUTOR DEALER

Get lined up with a good line for '51.

Farm and home freezers, commercial display cabinets, dairy cases, bottle coolers, walk-in coolers.

Profit by selling the American "Aristocrat" line.

AMERICAN REFRIGERATION CORPORATION

1025 E. Excelsior Avenue
Hopkins, Minnesota

Packard Told Utility Group That . . .

"In the months ahead, we may very possibly face a condition in which certain appliances are in reasonable supply, while others are extremely short—all because of the way controlling orders are now written. This is a situation that we as manufacturers cannot adjust. . . . It (the steel control order) doesn't allow us to shift from one to the other. . . ."

"... keep in close touch with the distributors of various products . . . lest you spend time and effort doing promotion work on an appliance in short supply."

"... unless the demand is further reduced by more stringent credit controls and higher excise taxes, (the picture) is one of shortage in all major electrical appliances."

"Show them (retailers) how much more effective jobs they can do in selling home freezers if they use actual samples of frozen food, especially home prepared baked goods and leftovers."

"You and your utility should be conscious of the load building opportunities that still remain in the electric refrigerator field."

"Cleanliness was away out and ahead as the major reason given by electric range purchasers for their preference."

From where we look at the picture, however, the long range viewpoint is that production cuts before too long will reduce the available supply of refrigerators below consumer demand.

Inventories of electric ranges, home freezers, and electric water heaters right now are short at all points, with demand presently high. There seems to be nothing in the picture on these products but allocations and continued shortage.

While I am going out of my field in mentioning a product my company does not manufacture, I feel at liberty to report to you that we hear many stories of low inventory and a shortage position also in automatic washers.

Controls Limit Supply

Therefore, in the months ahead we may very possibly face a condition in which certain appliances are in reasonable supply, while others are extremely short—all because of the way the controlling orders are now written. This is a situation that we as manufacturers cannot adjust, as the steel control order applies to our production of each individual appliance. It doesn't allow us to shift from one to the other.

Members of the appliance industry have requested a change of this ruling, but at the present time we have no indication as to whether our request will be granted.

This unquestionably means confusion for those of you planning promotion activity on various appliances in the coming months. It is apparent that you and your sales departments must keep in very close touch with the distributors of various products in your territories, lest you spend time and effort doing promotion work on an appliance in short supply, when actually your retailers may need assistance temporarily in moving products on which they are overstocked.

Shortages In All Major Appliances Due

However, the long range picture for late 1951 and for 1952—unless the demand is further reduced by more stringent credit controls and higher excise taxes—is one of shortage in all major electrical appliances.

At this point I would like to make a comment about the value of your work as home service directors, in case we do go into a period of short supply on all major appliances. Only a few years ago we went through a period of "no supply" for three years. The work you did during that time has shown very tangible results.

I think the outstanding example I can give you is that in 1942 we went into the war years with the consumer acceptance of electric ranges at a certain level across the country. For three years no sales effort was put behind this product by manufacturers or dealers.

However, when we came out of the war all of us quickly realized that the consumer acceptance for this product was considerably greater than it had been at the time production stopped.

Home Service Advisors Helped Span the War Years

As we looked back over the war years to see what had happened, one factor was clear. You home service advisors and your associates, the home equipment editors of our women's magazines, kept right on effectively telling Mrs. America that the electric range was the modern equipment for food preparation.

Together you kept at your work so consistently and so effectively that in my opinion the consumer acceptance for this product kept right on growing throughout the years in which there was no direct selling effort.

I mentioned earlier that it was (Concluded on next page)

OASIS national consumer advertising



"BULL'S-EYES" your biggest water cooler markets!

Now—it's new and big! 1951 Oasis Water Cooler advertising scores direct hits on all three of your principal markets—stores and offices, factories, institutions. Here's what this means to you—

Regularly scheduled national consumer advertising in TIME and NEWSWEEK will sell the powerful OASIS story across the board, to all the people important in making the decision to buy water coolers. Oasis distributors tying-in with local drives will hit a jack-pot payoff, on the hottest selling-story in the cooler field! Here's the Water Cooler that means money in your pocket!



look at these Five-Star Selling Features!

- ★ Quality in Coolers that is a byword in the industry—a "buy-word" to TIME'S and NEWSWEEK'S millions. By Oasis—world's largest maker of electric drinking water coolers!
- ★ The patented "Fountain" that ends explosive squirting—takes the "eyewash" out of getting a drink!
- ★ The improved "Pre-Kooler," that actually doubles water-cooling capacity.
- ★ Quiet operation, with the Oasis Fan-less Condenser—eliminates fan and motor noises!

Write today for catalog and full details. Also ask about the Oasis Air Dryer that reduces basement humidity. The EBCO Manufacturing Company, 409 W. Town Street, Columbus 8, Ohio.

OASIS



The world's largest manufacturer of
ELECTRIC DRINKING WATER COOLERS

MITCHELL Room Air Conditioners The Profit "Shot-in-the-Arm" for your Summer Appliance Business!

HERE'S WHY

3 BIG SELLING FEATURES

- Dyna-Cooler
- Turbo-Dryer
- Air Scoop

Longest Margins for Biggest Earnings

Acclaimed Everywhere the World's Finest

Ride the MITCHELL selling wave in 1951, with these exclusive advantages. Get set right now for profits—write today for complete details on the money-making MITCHELL dealership.

MITCHELL MFG. COMPANY
Chicago 14, Illinois
Makers of the World's Finest Room Air Conditioners



MITCHELL is better than ever in '51! get your share of this big volume business

WRITE FOR THE PROFIT FACTS ACT NOW

MITCHELL MFG. COMPANY
2529 N. Clybourn Ave., Chicago 14, Ill.

Send me all the facts and quote me dealer prices at once on MITCHELL Room Air Conditioners

Dealer's Name _____

Address _____

City _____ State _____

By _____

Shifts In Sales Emphasis Outlined

(Concluded from preceding page)
very probable in the months ahead that you would face in different markets, at different times, conditions where inventory and availability would make it practical to put promotional effort behind the sale of certain appliances.

I would like to mention the constantly changing conditions we as merchandisers and you as home service directors run into in connection with the consumer appeal in the various products we are promoting.

Let's take the electric refrigerator as an example of what I mean, and trace briefly a number of steps this product has been through in the last 5 years from the standpoint of consumer appeal.

Very few of you here can remember the days of the early promotion of this product when sales were made by telling the story of molds, yeast, bacteria, and enzymes. The housewife literally had to be scared and made to realize the awful things that might happen to her family if foods in her home were not kept at temperatures below 50° F.

As acceptance grew, we went through a period of time when emphasis was on operating costs, and the important part of our sale was convincing most customers that they could afford to operate an electric refrigerator.

Shift of Selling Emphasis

Next, we went into a period of low term selling, in which we emphasized to the lower income groups the fact that it cost them less to purchase an electric refrigerator than it did to keep on buying ice. This was in the days of meter selling. We came out of this period into one of gadgets and convenience.

In recent years we have seen the emphasis again change to size, as first-time buyers of 6-cu. ft. boxes began to realize what all of us had told them before—that they would never buy a refrigerator large enough.

Now, we are probably going on into a period of combination refrigerators, low-temperature compartments, and other new developments. Isn't it interesting, as we look back over the years, to see how many times our sales emphasis has changed on this one product?

I think we have already seen a

couple of changes in consumer appeal take place on electric ranges. Only a few years ago, the big hurdle we were teaching everyone to overcome was the cost of installation, and along with this, we were telling the story of safety to overcome the problem we then had on speed.

I have just reviewed a recent survey made with several thousand recent purchasers to determine what buying motives were the most important in their selection of an electric range. I think you will be interested in knowing that this survey showed in 1950 "cleanliness" was away out and ahead as the major reason given by electric range purchasers for their preference.

Cleanliness a Major Factor In Electric Range Selling

Evidently the story is rapidly going from one housewife to another, aided of course by the many licks you folks put in as to how much less washing of walls, curtains, etc., is required in a home equipped with an electric range. I am sure other manufacturers are discussing this information and will adjust their advertising sales story in this direction, as we are.

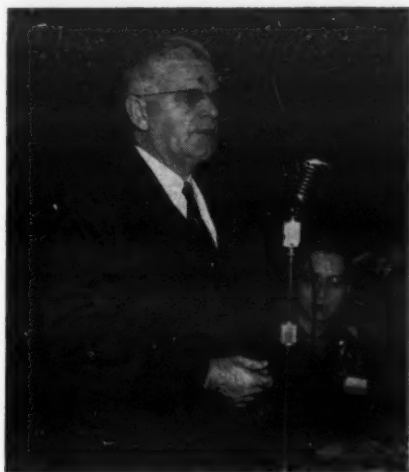
Now for home freezers. At the inception of volume selling of this product, at the close of the war, I am sure and I think you will agree with me, that the major buying urge, although seldom admitted, was anxiety to hoard food.

As food supplies became more plentiful, you and we quickly changed the emphasis of our promotion to the preservation of home-grown food by freezing during the growing seasons. Considerable effort was placed on this buying motive for some time.

However, in the last couple of years we have seen the buying motive behind the purchase of this product, especially as acceptance increased in cities, change to the importance of convenience and savings—convenience largely in terms of saving in shopping trips.

'Convenience' More Important Than 'Saving'

Recent buying surveys on this product show that these two buying motives are now away out ahead of the earlier reasons people had; and that actually "convenience" is some-



D. A. PACKARD, Kelvinator household sales manager, addressing Edison Electric Institute meeting of home service advisors, Chicago.

what ahead of the "saving" appeal. I think it might be interesting to review the changes that have taken place on these three products as an indication of the alterations all of us here must make in order to keep up with the public and its reasons for buying our products.

One thing we can all be sure of—the reasons will continue to change. Those of us who keep up to date and change with our public will find ourselves doing a more effective promotion job than we would be able to do if we were to keep on using buying motives that are no longer the primary reasons people have for purchasing the products we are anxious to sell them.

Before we leave the subject of the promotion of various appliances, I would like to make a comment about household refrigerators. With the market saturation of this product at its present high level, we have had indications that a number of utilities are turning their attention to the creation of acceptance for newer appliances.

Load Building Opportunity

We think it is a fine and fundamental thing for utilities to continue their effort in developing public acceptance for new appliances, but we also believe that utilities still have a lot to gain through the promotion of modern electric refrigerators, especially through encouraging home-makers to replace their out-of-date 6-ft. refrigerators with the new 9, 10, 11, or 12-ft. models with ample storage space for frozen foods.

While great strides have been made by manufacturers in making refrigerators operate more efficiently and at lower operating cost per cubic foot, it is still a fact that 11 or 12-cu. ft. refrigerators maintaining 38° F. in the food compartment and 0° F. in the frozen food chest, use at least 50% more current than old style 6-ft. models.

I merely point this out because I think you and your utility should be conscious of the load building opportunities that still remain in the electric refrigerator field.

Promotion Suggestions

Now I would like to have—borrowing the title from a well-known magazine—a "Why don't they" session. Here are a few thought-starters as to some things you, as home service advisors, might consider doing in the interest of merchandising more electrical appliances.

Let's start off by stating that one of the problems we as manufacturers have continually is that of encouraging our retailers to display electrical appliances properly. This was brought to my attention by a comment made by Maude Wilson of Oregon State college, in an article she recently prepared for the *Kitchen Reporter*.

Miss Wilson said: "If I go in to buy a refrigerator, I am confronted with a line of gleaming cabinets. Most of them are empty, although now and then there is one filled with plastic watermelons, roasts, and milk bottles. My job is to decide what size to buy and to select one of the models available in that size."

The variety of shapes and interior fittings is confusing. Questions flood my mind. I'd like to take some of those plastic food models and do a little experimenting with space arrangements that would be practical for my situation."

She went on to wish that the salesman would encourage some of this type of demonstration and selling.

So, for my first "Why don't they?" Would it be possible for you home service advisors to set aside each year, one week in which you and the members of your staff would have a

meeting with the retailers in your community devoted to the advantages of proper product display?

Tell them what proper display would mean to the homemaker, and what it would mean to the retailer in increased sales. Then call on the retailers individually with the one thought in mind of showing them on their sales floor how much better a refrigerator looks lighted, and loaded with plastic food and bottles; and how much better the electric range can be demonstrated if it is hooked up so that the top light and switch lights actually work.

Make Appliances Look Alive

Then show them how much more effective a job they can do in selling home freezers if they use actual samples of frozen food, especially home prepared baked goods and leftovers that they can show all their customers while demonstrating.

We as manufacturers have spent endless time and effort in the preparation of materials and training in this direction. We are not pleased with the results we have obtained and here is a place you can definitely help.

Another thing that we have worked on together is the use of electric refrigerators and electric ranges in the home economics departments of our schools. However, I have a feeling that we are not making as much progress with the home freezer as we should be making. Much of our difficulty stems from not getting school boards to make appropriations to buy the product.

So, for my second "Why don't they?" Why not suggest to home economics teachers of the high schools in your community ways in which the classes themselves can work with retailers to earn the money for the purchase of their own home freezer? Bake sales could be held.

In some places retailers, might be sold on the idea of paying home economics students a small amount to come into the store on Saturdays and demonstrate to customers the practical home uses of a home freezer. It is certain that the dealer would create additional traffic, at least to the extent of friends and relatives of each home economics student employed. Simple demonstrations could be prepared under your guidance.

So if we are having trouble getting home freezers into high schools for home economics teaching, why don't we organize the girls in this or some similar manner to purchase their own?

Use Demonstration Parties

In a recent issue of *Home Service Exchange*, Ann Sutter of Duquesne Light made a suggestion that I would like to emphasize, because I think it offers a great opportunity and a splendid approach.

Instead of having mass selling demonstrations in your auditorium or public place, persuade owners of electric ranges to give a demonstration party, arranging to have an appliance dealer act as sponsor, with gifts for the hostess and her guests, and a home service representative present to make a short demonstration of the product being promoted.

Here is an example of an old, old sales idea that in my opinion will never wear out in effectiveness, and will always produce a lot of sales in relation to the time and expense devoted to it.

I would like to give you one more "Why don't they." Several times during this session I have referred to surveys we as manufacturers make trying to find out how to build more of the things consumers like and less of the things they don't like. Certainly there is no group in America better informed on this subject as it pertains to appliances than you home service advisors.

Why don't you devote one issue per year of the *Home Service Exchange* to discussing openly and frankly what you find customers like about the products we build and what you find they do not like. Then, place a copy of this edition in the hands of every manufacturer in our field.

I am equally confident that after a few years of such a service, you could not help but have appliances coming out of our factories even better designed for the needs and convenience of the homemaker than they are today. This service would be of inestimable value to the public, your utilities, and to manufacturers alike.

Display
This Flag
in Your Store



And Watch
YOUR Summer
Profits Soar!

With Low-Cost
Cooling
Folks Will Buy!

The complete line of Coolair Breeze Conditioning units means summer cooling within the financial reach of almost every prospect. There are small window units, single and twin attic package units and home, commercial and industrial units up to 9' blade diameter—a unit for every cooling job!

THIS SALES PLAN BOOSTS YOUR PROFITS HIGH!

1. Valuable Franchise

You are guaranteed a market area large enough for excellent profit opportunities.

2. Sales Training

When you become an authorized dealer, your personnel will be trained under factory supervision. Your profits start in a hurry!

3. New, Hard-Hitting Advertising and Promotion

Up-to-the-minute Coolair advertising and promotion helps pave the way for profitable sales. Factory even sends direct mail to YOUR prospects!

This unique Coolair proposition for 1951 is a money-maker you can depend on. Don't delay—mail this coupon NOW! No obligations.

AMERICAN COOLAIR CORPORATION
Leaders in Air Cooling for 23 Years

Dept. ACR-43, American Coolair Corporation
Jacksonville 3, Florida

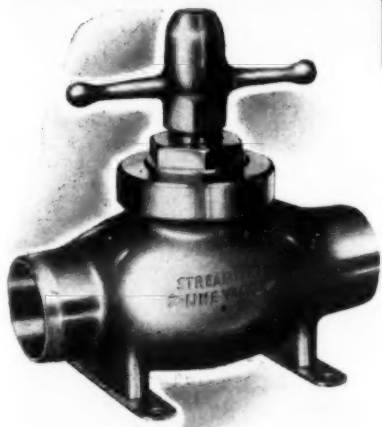
Please RUSH us more information about the Coolair proposition for 1951. We are interested in () a dealership, () a distributorship.

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ADDRESS _____
TOWN _____
ZONE _____ STATE _____



a good tip for
wise refrigeration men:

Always use dependable
quality built
MUELLER BRASS CO.
parts.



8 good reasons why
it pays to stock,
specify and install
Mueller Brass Co.
STREAMLINE
Globe Type Valves.

- No bolts—no flanges—no gaskets.
- New design eliminates excessive weight.
- Can be disassembled and ready to solder into the line in 10 seconds.
- Stem of corrosion resistant aluminum bronze.
- Highly polished red bronze body.
- Sizes 1/2" to 4 1/2" O.D. Order from your refrigeration wholesaler.

- Positive shut-off always assured with the amazing nylon stem seating disc.
- "O" ring provides a permanent, positive seal against any loss of refrigerant.

60-A

Have these STREAMLINE products
on hand for every job where you
want dependable performance.



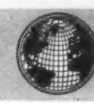
STREAMLINE refrigeration
products are individual
and multiple packaged
for complete protection.

MUELLER BRASS CO. PORT HURON 10, MICHIGAN

They'll Do It Every Time By Jimmy Hatlo



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450 W. Fort St., Detroit 26, Mich. Telephone Woodward 2-0924.

Subscription Rates: U. S. and Possessions, Canada, and all countries in the Pan-American Postal Union: \$5.00 per year; 2 years \$8.00. All other foreign countries: \$7.00 per year. Single copy price, 20 cents. Ten or more copies, 15 cents each; 50 or more copies, 10 cents each. Please send remittance with order.

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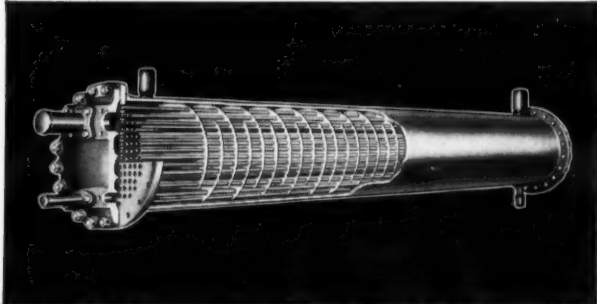
JOHN F. JOLIAT, Circulation Manager

Member, Audit Bureau of Circulations. Member, Associated Business Papers.

VOLUME 62, No. 17, SERIAL No. 1,153, APRIL 23, 1951

"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—Charles A. Dana.

Do You Have 'Both Feet On The Ground'?



specify

Acme

for engineering QUALITY
and PERFORMANCE

When you specify "ACME" your equipment problem is greatly simplified, because the "ACME" Line is so complete that you will always find a product, model and size tailored to fit every refrigeration requirement.

DRY-EX® WATER CHILLERS

More than 700 combinations of heads, baffle spacings and tube lengths, capacities from 1 to 200 tons. High rate of heat transfer; replaceable tubes; optional choice of single or dual circuits on 12" or larger; positive oil return without the need for oil separator; improved head design, tube hole grooving, tube rolling and baffle construction, make ACME DRY-EX® Water Chillers truly outstanding.

EVAPORATIVE CONDENSERS

for Freon or Ammonia in more than 30 models with capacities from 120,000 to 1,250,000 BTU/Hr. Through tube construction; Electro tin plated baffles. Oil bleed connections provided if load drops below design load, Cast Steel Heads—these and other advantages exemplify the superior quality you get when you specify ACME.

ACME OIL SEPARATORS

Two separate series, Ten Models for Freon and six for Ammonia. ACME Oil Separators provide positive oil separation, are easily accessible, require practically no maintenance and help to muffle compressor discharge noise.

ACME CONDENSERS

Are noise-free, easy to clean and have leak proof joints. A complete line of Freon, Ammonia, Shell and Tube and Shell and Coil is offered. You can choose from more than 120 standard sizes to get the right model to meet every requirement.

ACME COOLING TOWERS

Available in capacities from 3 to 40 Tons. Induced draft design offers increased efficiency, with quiet operation and water saving features. Housing constructed from 11 and 14 Ga. steel. NON-CORROSIVE Cooling Pads. Hot-dip galvanized after fabrication.

FLOW-COLD® LIQUID CHILLERS

Self-contained, compact and efficient Units completely wired and with refrigerant piping completed and tested at the factory. Can be used for heat-pump application where suitable heat source is available.

ACME LIQUID RECEIVERS

Offered in more than 70 standard sizes, from 6 3/8" x 18" to 30" x 240", for Freon, Ammonia or other refrigerants—are easy to install and maintain.

HI-PEAK® WATER COOLERS

have large storage capacity and are galvanized after fabrication. Offered in seven standard sizes. For intermittent or continuous operation. EVERDUR Tank and factory insulation are optional.

BLO-COLD® INDUSTRIAL UNIT COOLERS

Five distinct series in more than 260 combinations with dry coil operation or continuous brine spray defrosting or for flooded Ammonia operation. Coils are easily accessible, fan sections are separable and large doors facilitate inspection. Hot Dip galvanized after fabrication.

Priorities and the Contractor

DEALERS and contractors handling refrigeration and air conditioning equipment have somewhat of a right to feel that in the present confusion of government by directive, it might seem that some of the most confused confusion was concerned with products that are vital to the conduct of their business.

One contractor who telephoned us shortly after the original amendment to Copper Order M-12 was issued (banning the use of several forms of copper in a wide variety of refrigeration items) said that—

"I could read this order in such a way as to mean it is designed to put me out of business."

The amended Copper Order M-12 was never intended to do that, of course, and subsequent changes and interpretations have lightened considerably the effects of the restrictions as originally written.

At the moment, it seems probable that refrigeration equipment and air conditioning contractors will not have too many actual barriers ahead of them for the next few months. Some types of equipment will be difficult to obtain, and some components will be scarce, but not all. Generally, the contractor's problems will be much the same as in the past—finding the markets for his products, and selling those markets.

There are problems remaining, of course, in the matter of materials, and on certain items the combination of restrictions on use and scarcity of materials have severely limited the ability of the manufacturer of these items to produce.

There's one thing that all contractors, dealers, and service firms can do to help assure a continued flow of repair and replacement parts and supplies. That function is to determine always whether or not the customer is operating under a materials, repair, and operating supplies priority, and if he is, to get from the customer the DO-97 priority and pass it along, so that it eventually will reach a manufacturer.

The reason why this helps to assure a continued flow of such equipment is simple. Producers of materials used in such parts must honor "DO" orders before filling other orders for their materials, and they must fill them within a certain time, which means that the flow of equipment can thus be assured.

Some individuals and companies in the industry have shown considerable indifference to the possibilities of NPA Regulation No. 4 which provides for the application of the "DO-97" rating for maintenance, repair, and operating supplies. They point out that the man operating a business which could apply the "DO-97" for maintenance and repairs doesn't want to be bothered signing an order that way, and keeping records on it (which Regulation 4 requires).

Certain chain store units, it is reported, have been specifically forbidden to make any use of Regulation 4. And furthermore there doesn't seem to be any noticeable scarcity of repair and operating supplies.

Such an attitude is causing great concern among manufacturers of such products in the refrigeration field. They point out that in other industries a concentrated effort is being made to take advantage of Regulation 4 and to see that the ratings are extended back to the manufacturer. Thus, when the rated orders pile up with the supplier of the scarce material, the refrigeration industry could suffer if it doesn't have its share of rated orders in the mill.

Wherever refrigeration is used, ACME major components are in evidence and have deserved the preference of the Industry for more than 30 years—Write for Catalog and further information on any item required.

*Trade Mark

Acme

INDUSTRIES, INC. JACKSON, MICHIGAN

CONTINUOUSLY SERVING THE REFRIGERATION INDUSTRY SINCE 1919

SLANTS on Service

"Slants on Service" is a new "package" devised by the NEWS to meet the needs of its busy readers in the service and contracting business. These helpful hints and suggestions for improved service methods and shortcuts have been assembled in capsule form.

If You Must Multiplex,

Observe These Precautions

Although the trend of the refrigeration industry is away from multiplexing two-temperature jobs on one condensing unit, if it must be done these four important principles should be remembered:

(1) Don't combine two coils or evaporators on one unit if the desired temperatures of the coils are more than 10° F. apart.

(2) Be sure that the low-temperature load is more than half of the total load.

(3) Don't operate an open self-serve case and a conventional closed case off the same unit.

(4) Don't multiplex gravity and forced-air coils on the same unit.

Drier In Air Intake Keeps

Oil Drum Free of Moisture

Any oil added to a refrigerating system should be free of moisture, otherwise moisture troubles will result. Refrigeration oil supplied by manufacturers in small containers is dry and can be kept that way.

Some contractors and servicemen, however, prefer to buy oil in large drums. From the large drum oil is

drawn off into service containers for use on the job. Air rushing into the drum as oil is removed frequently adds moisture to the oil.

This can be avoided by installing a refrigerant drier in the opening of the drum which admits air as oil is removed. Some contractors put the drum on its side in a wooden stand with a simple hand valve screwed in for removing the oil.

Then they insert a length of tubing into a top opening. A drier is soldered into the tubing. Thus, all air must go through the drier first before reaching the inside of the drum to replace the oil.

Two Methods To Prevent

Oxidation In Brazing

Oxidation which can occur in the inner surfaces in making a brazed joint may be avoided in the field by two methods.

One method suggested is to blow a charge of nitrogen or carbon dioxide through the lines after the joints are in place but before they are soldered. This will remove most if not all of the oxygen, which causes the trouble.

Another successful method is to flow natural gas through the system to remove the oxygen. The gas is burned at the outlet end.

1951 Bakeraire Models Viewed by Distributors

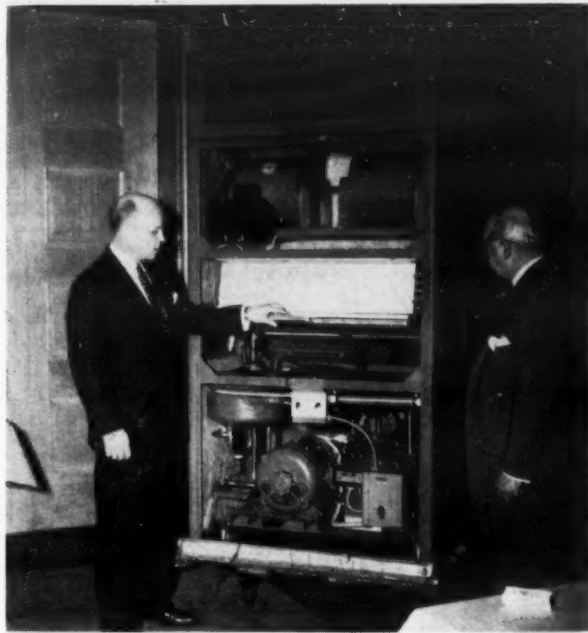
CHICAGO—The new 1951 models of the Bakeraire self-contained air conditioning unit were presented to distributors of the Baker Refrigeration Corp. at Chicago early in April in one of a series of regional meetings held in Atlanta, Dallas, Kansas City, Cleveland, Philadelphia, and Chicago.

Featuring engineering developments that reduce operating costs and at the same time provide more cooling per horsepower, the new Bakeraire is designed for low-cost air conditioning in stores, restaurants, offices, and other similar business establishments as well as for industrial applications. The unit is currently available for early delivery in four sizes . . . 3, 5, 7½, and 10 tons.

Several new design features are introduced in the Bakeraire unit for the first time. The new "Sphericoil" condenser is over capacity to provide for extremely rapid heat exchange, thus lowering water consumption. A new humidity control gives greater flexibility in reducing humidity on hot days for greater comfort.

A new 45° "plumbing tree" cuts installation time as much as 50%, to lower installation costs, it is claimed. New permanent-type crimped wire air filters are easily removed for quick cleaning with steam or hot water. The entire compressor unit is spring-mounted to reduce vibration to the minimum. Extremely quiet operation is further assured with Fiberglass insulation.

Two blower fans in the 5, 7½, and



MARK MOONEY, Baker sales manager, points out one of the features of the new Bakeraire self-contained air conditioning unit to A. M. Reilly of Burge Ice Machine Co., Baker distributor for central area.

10-ton models assure adequate and quiet, draft-free air flow. A removable plenum allows front or rear four-way air discharge . . . right or left, up or down. The Baker open-type compressor, with Timken anti-friction bearings, or hermetics, is available in all models, according to the company.

Baker distributors were also given a preview of the national and local advertising and promotion program under the theme "Intentionally Better Since 1905." This program is supported by the largest advertising budget in the company's history. National advertising is spearheaded by an extensive schedule in *Time* and *Business Week*. Baker will also continue to maintain a steady schedule

of advertising in *AIR CONDITIONING & REFRIGERATION NEWS*.

A complete local advertising program has been prepared for distributors, including newspaper advertisements, a direct mail program, plus a new direct selling literature program . . . highlighted by the "Story of Baker" brochure, which presents company contributions to the industry and the full Baker line.

Mark E. Mooney, general sales manager, headed up the Baker group presenting the meetings, accompanied by C. M. Hatcher, advertising manager, A. J. Mallinckrodt, chief engineer, W. C. Rehor, service manager, and Gene Thomas, Baker account executive from Gould and Tierney Advertising Agency of New York.

Micromet Feeder Eliminates Lime Scale On Condenser Coils, Locker Owner Says

SYRACUSE, N. Y.—A simple chemical treatment to prevent lime scale on the condenser coils of its refrigeration equipment proved a "life-saver" to the Igloo Food Lockers, Syracuse, according to S. A. Scobell, owner.

Scobell, who is a former president of the Frozen Food Locker Institute, said that prior to installation of a No. 100 Micromet Feeder, it was necessary to call in a serviceman nearly every week after the equipment became six months old.

"Lime scale formed on the coils until they failed to perform their cooling function," Scobell said. "We installed our condenser unit in April, 1947, but had so much trouble of this kind that we found it necessary to replace the coils one year later."

"Then we ordered a 100-lb. capacity Micromet Feeder and, at the recommendation of the manufacturer's representative, put in 57 lbs. of Micromet as an initial charge."

"During the first year we added about 15 lbs. of Micromet a month to replace that which had been dissolved in the water of the refrigeration system. After that we were able to reduce the quantity to about 10 lbs. a month."

"In contrast to our troubles in the year before, in the nearly three years since the Micromet Feeder was installed the coil has never scaled up and it is still working perfectly. We get a slight amount of slime on the

coils, but this does not affect the cooling."

Micromet, a product of Calgon, Inc., Pittsburgh, is a slowly soluble vitreous phosphate which is used in preventing water troubles in refrigeration and air conditioning systems. When added in small amounts to a water system, it prevents the formation of scale and controls corrosion. The chemical dissolves at the rate of approximately 25% of its initial weight a month, regardless of how much water is passed over or through it.

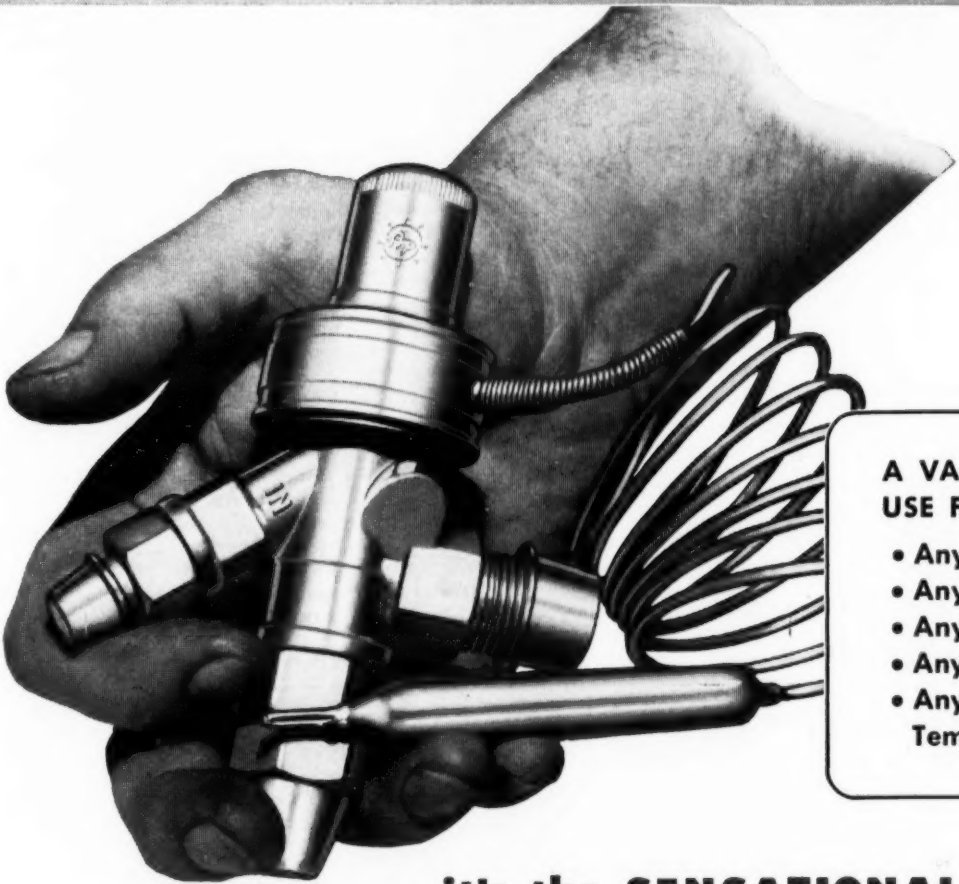
Without water treatment, lime scale tends to accumulate on condenser tubes, in valves, pumps, and pipe lines when hard water is evaporated or heated. This scale insulates the tubes, cutting down the cooling capacity of the unit, which results in higher head pressures and loss in efficiency.

To prevent scaling, Calgon, Inc. recommends an initial charge of one pound of Micromet and a monthly recharge of ¼-lb. for each 200 gals. of make-up water used per day.

Soft, corrosive water, on the other hand, eats away the iron and zinc surfaces, resulting in a badly rusted system and eventual loss.

For control of corrosion, the manufacturers recommend an initial charge of one pound of Micromet and a monthly recharge of ¼-lb. for each 100 gals. of make-up water used per day.

THIS YOU MUST SEE . . .



A VALVE YOU CAN USE FOR:

- Any Application
- Any Pressure Limit
- Any Superheat
- Any Position
- Any Ambient Temperature

... it's the **SENSATIONAL NEW**



no. 209

THERMOSTATIC EXPANSION VALVE

The **UNIVERSAL** expansion valve the whole industry's talking about!

You owe it to yourself to get the full story on this remarkable new expansion valve — because it's the most useful all-around valve ever designed!

Just think of these features: It's adjustable for ANY pressure limit or for ANY superheat. You can install it in ANY position — in ANY ambient temperature — on ANY application. No matter what

the job may be, you can "tailor-make" the No. 209 to fit — instantly!

Now think what these practical features mean to you. They save you time and trouble — reduce inventory — cut costs — increase profits. No wonder users call the No. 209 the greatest advance in expansion-valve design in twenty years!



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A-P CONTROLS CORPORATION

(formerly Automatic Products Company)

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Stocked and Sold By Good Refrigeration Wholesalers Everywhere • Recommended and Installed By Leading Refrigeration Service Engineers

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HARRY ALTER'S
SPRING-AND-SUMMER 1951
DEPENDABOOK No. 154

OVER 9,000 REFRIGERATION PARTS AND SUPPLIES

To successfully conduct a business in these days of scarcities, you really need DEPENDABOOK No. 154... If it's available you'll find it listed in this latest edition.

WRITE FOR YOUR COPY ... ON YOUR LETTERHEAD

THE HARRY ALTER CO. WHOLESALE ONLY
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CHILL CHEST

*The Greatest
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PREFERENCE EVERYWHERE



Revco, INC. • DEERFIELD, MICH.

for more

**Ice Maker
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**FILTRINE
"Taste-Master"
Demineralizer
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Crystal ice... without sludge-forming rust, sediment, mineral residue... chlorine taste... "milky" taste. Ends major source of service calls. Write for new literature.

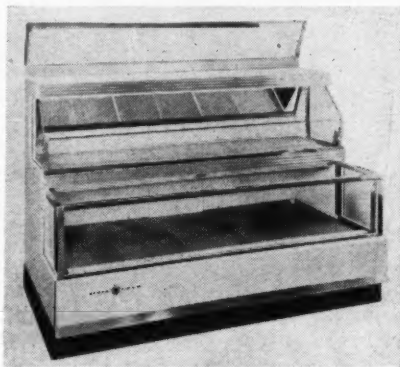


Water Coolers and Filters for 40 Years
FILTRINE MANUFACTURING CO.
BROOKLYN 5, N. Y.

What's New

When requesting further information on new products, please use "Information Center" form.

Super-Cold Case Has 33 Sq. Ft. of Shelf Space



—KEY NO. A-440—

LOS ANGELES—A total of 33.4 sq. ft. of shelf space in a floor area measuring 77 by 41½ in. is the outstanding feature of the new "Dual Decker" multiple-shelf, self-service delicatessen and dairy case recently introduced by the Super-Cold Corp. here.

Called the model 700-7, the case provides two levels of refrigerated display while the top can be used for non-refrigerated display.

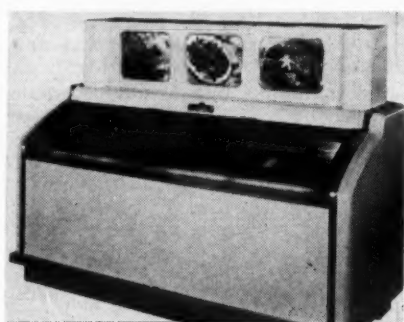
Concealed fluorescent lights illuminate both the refrigerated shelves. The upper shelf is backed by a heavily silvered reflecting mirror which picks up the reflection of the merchandise in the case. A full view mirror which can be installed atop the case, is an optional feature.

A 3-in. wide polished aluminum tag moulding above each shelf permits price tags for a variety of items to be shown.

Refrigerated air circulates up through air ducts behind the shelves and flows over the merchandise and down again to the heavily finned cooling coils, where blowers recirculate it.

Sealed double-plate glass display front and ends help prevent dissipation of the refrigerated air and, at the same time, resist frosting. A 1-in. drain pipe is located at the front center of the case behind the removable kick-plate to carry off condensation.

The front of the case is protected by a stainless steel basket bumper rail and kick plate. The case is finished in white porcelain with metallic trim.



Philco Kitchen Tool Set Includes Wall Hanger

—KEY NO. A-442—

PHILADELPHIA—A 7-piece stainless steel kitchen tool set, with durable heat and stain resistant handles and complete with wall hanger, was announced recently by J. C. Courtney, Jr., sales manager, Accessory Division of Philco Corp.

The kit is designed as an ideal gift for weddings, showers, birthdays, and other occasions. It is available with either black or white handles and consists of a potato creamer which mashes, creams, and whips potatoes in one operation; a Tu-Lip ladle with two no-drip pouring lips for left or right hand use; a utility spoon designed to easily remove food from hard-to-reach corners of pans; a Tu-Prong fork with a "bulldog grip"; a narrow spatula with a handy tapered end for inaccessible places; and a food turner with offset handle and improved design of turner blade. Also included is a 6-place wall hanger with beveled protective edges and convenient hooks.

Decoratively packaged, each Home-maker Gift Set converts easily into an attractive counter display, protected by a transparent acetate plastic cover. These sets are manufactured of highly polished solid stainless steel with durable ivory plastic handles. Kits are available through Philco distributors or the Accessory Division of Philco.

Frozen Food Cabinet Added to Nolin Line

—KEY NO. A-441—

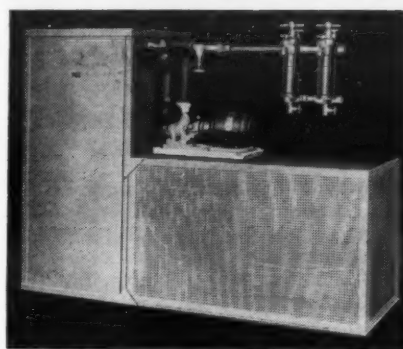
MONTGOMERY, Ala.—Nolin Mfg. Co. here has announced the addition of a frozen food merchandising cabinet to its line of commercial refrigeration equipment.

The cabinet is said to offer greater accessibility to the storage compartment through three lids that slide back and disappear beneath the cabinet top. These lids are removable for loading or to facilitate rush hour business.

The cabinet also has die formed panels, high density fiberglass insulation, positive vapor seal, heavy duty freezer plates, and a glossy white enamel finish.

The superstructure is equipped with three-dimensional pictures illuminated from the rear. The unit is available for immediate delivery, according to A. C. Nolin, president.

New Filtrine Packaged Water Circulating System



—KEY NO. A-443—

BROOKLYN—Filtrine Mfg. Co. has developed a completely packaged circulating system which supplies chlorine-free water to as many as 300 drinking stations.

This new unit can supply offices, hospitals, and other multi-story buildings as well as large-area buildings such as mills and factories with up to 400 gals. per hour of 50° water, according to Filtrine. In addition, it is said to generate up to 150 gals. reserve chilled water to meet the extra-heavy demand for drinking water at rest periods, factory shift changes, and the recurring "gang" demands of mill and foundry workers for chilled water for drinking and cooling.

Smaller models in a range suitable for from three outlets up, have the same ratio of storage to capacity, according to the company.

The system is claimed to streamline engineering of central water cooling and to reduce installation time and cost.

Built with two balanced evaporators to prevent pressure drop, the heavy-duty storage cooler is heat-protected with two inches of hydro-lene-sealed corkboard at sides and bottom and with six inches of rock wool on top.

A heavy-duty bronze-fitted pump with enclosed impeller circulates water with equalized pressure to all outlets.

A filter-rectifier assembly guards against varying conditions, eliminating tastes and odors and removing microscopic particles of rust, algae, and sediment of all kinds, Filtrine said.

The heavy-gauged, angle-framed container in which the unit is packaged houses any make refrigerating machine which can be factory installed with all approved automatic controls, the manufacturer further stated.

The unit is thus available ready for on-the-job hook-up to power, water, as well as return connections.



Led-Plate Lubricates and Seals To Stop Seizure

—KEY NO. A-444—

LOS ANGELES—An anti-seizure compound known as Led-Plate, which combines the advantages of a lubricant and a sealer, has been developed by Armit Laboratories here.

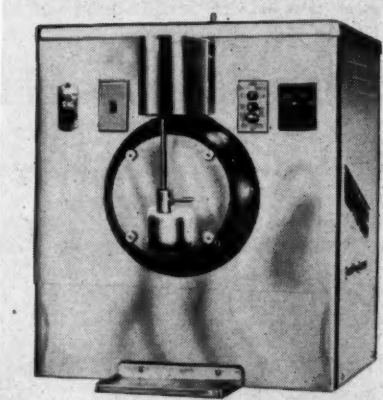
Effective results in eliminating seizure of pipe, bolt and stud threads, and gasket faces are obtained when Led-Plate is used in temperatures ranging from -350° F. to 2,900° F., the company claims.

The metallic elements, of which over 70% are powdered lead, are held in suspension in hydrocarbons, and the materials will not dry out, according to the manufacturer.

No graphite is used. The compound can be used for steam, gas, water, air, oil, ammonia, and various chemical connections. It conforms to government specifications.

A sample tube is available upon request to the company through this newspaper.

Sweden Shows New Model Freezer for Milk Shakes



Sweden Freezer Model M 1-190 is designed to handle large volume.

—KEY NO. A-445—

SEATTLE—The Sweden Freezer Mfg. Co., has announced the development of the M 1-190, a variation of the 1-190 continuous soft ice cream freezer.

This model, to be used specifically for making milk shakes, is especially suitable for large-volume installations.

The new model resembles the 1-190 in appearance and retains all the design features, including the electrical foot-switch operated draw-off gate, removable heavy gauge stainless steel, 4-gal. mix tank, and ball-bearing helical gear, and self-adjusting V-belt drive, with one motor operating both dasher and condensing unit.

Special features of the M 1-190 consist of a new "baffle" type dasher, especially designed for making milk shakes, and a temperature control that permits adjustment of the machine to any desired milk shake consistency.

Although capable of high-speed production of milk shakes (eight a minute on the average), the dimensions of the M 1-190—only 27 in. wide, 21 in. deep, and 31 in. high—permit this compact unit to be placed on backbar, counter, or on a special frame or reserve mix storage cabinet obtainable from the Sweden company.

The machine is completely self-contained, requiring only connections to cooling water, drain, and electrical power source, to be ready for operation.

WHEREVER FOODS ARE FROZEN OR STORED DOLE QUICK-FREEZE PLATES DO THE JOB FASTER, BETTER

The heart of frozen food success lies in quick freezing. The faster the freeze, the better the quality and flavor retained in the product. DOLE Quick-Freeze Plates have proved their superiority in every application of the frozen foods industry—processing plants, ice cream manufacture, dairies, hotels, restaurants and bakeries. Installation of DOLE Quick-Freeze Plates as shelves in the quick-freeze room or cabinet insures exceedingly fast freeze because the food is placed in direct contact with the flat, intensely cold plate surfaces where conduction removes the heat in 1½ to 2 hours instead of the usual 10 to 12 hours required in cooling by convection. Cold temperatures obtained with DOLE plates create natural circulation, reduce dehydration and increase the comfort of operators in the freeze areas. With DOLE Plates there is no loss from plant shut-down in defrosting since smaller tubing does the work of larger coils with from 25% to 50% of the usual refrigerant.

DOLE Quick-Freeze Plates are made in seven sizes: 16 x 20", 16 x 48", 22 x 30", 22 x 48", 22 x 60", 22 x 72" and 22 x 108". They can also be purchased completely assembled, with supports, and ready to be set into freeze room or cabinet.



DOLE REFRIGERATING COMPANY

5920 N. PULASKI RD., CHICAGO 30, ILLINOIS

103 Park Ave., New York 17

44 Elgin St., Brantford, Ont.



DOLE Freezer Plates in complete assembled unit, standard height 5 feet. Special heights can be furnished to order.

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**nolin all-purpose
Dry Beverage Cooler
with freeze-rific Cooling System**

available in four, six, eight, and ten-foot lengths

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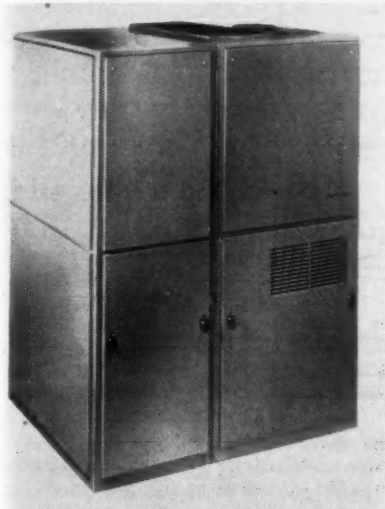
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What's New (Cont.)

Portable Humidifier Developed by Carrier



KEY NO. A-446

SYRACUSE, N. Y.—A portable, 1-hp. "Humidry" unit, designed for a wide range of dehumidification jobs from home basements to vaults and storage lofts, has been announced by Carrier Corp. here.

The improved model, weighing 60

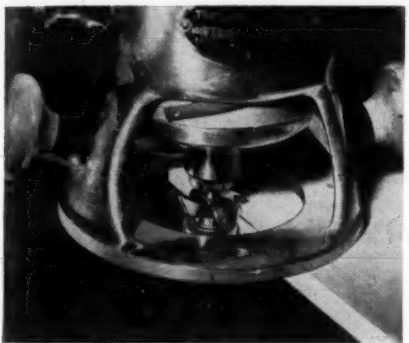
lbs., has been fitted with casters and handholds so that it can be easily moved wherever needed. It can be plugged into any 115-volt circuit.

Carrier officials report that under conditions of 80° F. and 70% relative humidity, the unit is capable of removing as much as 18 pints of water from the air in an average space every 24 hours.

"Reason for its high capacity lies in the special vertical arrangement of spiral finned evaporator coils, on which patents are now pending," Carrier stated. "The constant downward drainage of water along the spiral fins maintains a damp clean coil surface, and at the same time prevents an accumulation of water on the coil, thus insuring the most effective heat transfer conditions."

The unit is enclosed in a flat-topped, rectangular cabinet, measuring 23½ in. high, 17½ in. long, and 13½ in. wide, with a baked hammer-tone enamel finish. Condensed moisture can be disposed of through the nearest drain by attaching a piece of rubber tubing to the drip pan spout. A removable condensate pail is also provided with the unit.

Bevel Trim Tool Finishes Laminated Plastic Tops



KEY NO. A-447

MILWAUKEE—A new bevel trim tool for finish operations on laminated plastic tops is announced by North American Products Co. here.

Where the overhang of laminated

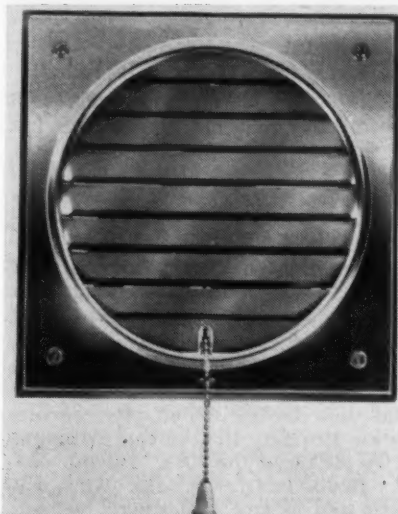
plastic glued to plywood cores must be trimmed, the new North American bevel trim tool allows this operation to be completed with router machines up to 15 times faster than hand finishing, the company claims.

The company says that the tool's design prevents "digging into" the finished plastic top.

Carbide-tipped blades are ground to a 29° angle and are so set as to provide a downward shearing action away from the top surface of the plastic. Not only does this combination of shear action and cutting blade insure against marring the surface, but it also combines the stock removing and final finishing operations into one single sweep of the bevel trim tool.

Stocked in ¼, 5/16, ¾, and 1½-in. shank sizes, the tools are available for immediate delivery, the company stated. Tools for angles other than the standard 29° or for flush trimming plastic sheet straight with the core can also be furnished.

Radia Kitchen Fan Offers Automatic Chain Control



Radia wall-type kitchen fan with automatic bead chain control.

KEY NO. A-448

PITTSBURGH—Automatic bead chain control is featured on the Radia 10-in. wall-type kitchen fan with Invisi-Grill front which is manufactured by the Shepler Mfg. Co. here.

Releasing the bead chain from the catch on the front starts the motor and opens the outside door in one operation, the company pointed out.

Outside door has heavy asbestos insulation and a double seal in the strong cast frame to make it weathertight and to prevent back drafts.

The Invisi-Grill front has the louvers set at the correct angle to permit a free flow of air but prevents any visibility of the interior when installed at the usual height in the wall, the fan manufacturer noted.

The front is finished in chromium or white Durenamel. All other inside parts are finished in gray Durenamel.

Wall sleeves are adjustable for any wall thickness from 5½ to 22½ in. Wall opening required is 11¼ by 11¼ in. Invisi-Grill front is 13 by 13 in. and the outside frame is 13½ by 13½.

The fan is equipped with a 5-bladed Torrington air impeller of one piece aluminum. It is rated at 650 c.f.m. and operates on 110-120-volt, 50-60-cycle, a.c. Current consumption is said to be about the same as that of a 45-watt bulb.

The hermetically sealed motor needs oiling only once or twice a year and carries a one-year unconditional guarantee. Motor and fan assembly can be easily removed for cleaning and servicing.

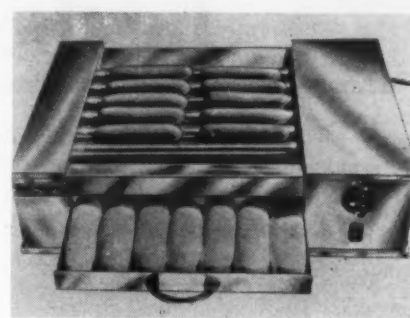
Improved 'Hi-Lid' Has New Look, Tighter Fit

KEY NO. A-449

PASADENA, Calif.—An improved version of its transparent "Hi-Lid" for use on refrigerated display cases has been announced by R. K. Merritt & Associates here.

The lid now features a white plastic trim with gray Neoprene hinge and gasket. The new look also incorporates an improved hinge assembly and a new gasket which insures a tighter fit on the cabinet.

'Roller Grill' Seals In Juices, Retains Flavor



J. J. Connolly's "Roller Grill" rolls and self-bastes frankfurters.

KEY NO. A-4410

NEW YORK CITY—Tastier frankfurters are said to be turned out by J. J. Connolly's automatic "Roller Grill" which seals in all the juices, retaining the natural flavor of the product being cooked and expanding its size.

The appliance rolls and "self-bastes" the frankfurter, with no greasing of the rollers necessary, according to the company. The slow motion of the rollers assures uniform and thorough barbecuing of the franks, the firm claims.

The grill is of all-stainless steel construction. It reportedly will not rust, stain, or tarnish, eliminates constant scraping and cleaning, requires no hoods or blowers, and does not cause cooking or grease odors or smoke.

The Roller Grill will plug into any standard 110-volt a.c. outlet, according to the manufacturer.

Information Center

For more information on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

What's New or Current Literature Available

Key No. Key No.
Key No. Key No.
Key No. Key No.
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Products Advertised
(list name, page, and issue date)

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Servicing Hermetics In the Field

This is the second instalment in a new series written to show servicemen what they can do (and also what they shouldn't do) to repair hermetic systems in the field.

Certain repairs can be made on the job if the serviceman diagnoses the trouble correctly and knows how to fix it. Other difficulties call for replacement or complete overhaul and cutting open the unit. The latter requires a specialist with a fully equipped shop. This series, however, is aimed at the average serviceman using ordinary tools.

The author owns and operates a large hermetic rebuilding plant and recently spent six months in Israel setting up the world's largest independent hermetic rebuilding plant.

Role of Relays & Overloads In Hermetic Systems

By Arne Perttola, Owner and Manager,
Brighton Hermetic Service, Detroit

All hermetic units except the three-phase units have starting relays of some type. Although there are several manufacturers of starting relays there are only two types in common use. One type is the "hot wire" relay and the other is the magnetic relay.

The serviceman must understand the operation of the relay if he intends to service hermetically sealed units. Quite often an improperly done minor repair job involving a relay leads to a major repair job later.

THE MAGNETIC RELAY

The magnetic relay operates somewhat like a solenoid. One side of the power line to the unit goes through the magnetic coil in the relay. Current flowing through the coil creates an electro-magnetic field, which draws the contact to the closed position.

This is shown in Figs. 3 and 4. Fig. 3 shows the contact of the relay in the open position, while Fig. 4 shows it in the closed position.

When the current is turned on by the control, the magnetic coil draws the contact into the closed position. This sends the current through the starting winding of the motor. As

soon as the motor is up to speed, the contact breaks the connection and the current flows only through the running winding of the motor.

The reason that the contacts do not stay in the closed position while the unit is running is that there is not enough current flowing through the magnetic coil to hold the contacts closed. When the unit is starting up or is stalled, it draws more than four times as much current as it does when operating under a normal load.

This means that in starting or in a stalled condition, the magnetic field set up by the coil in the relay will be four times as strong as when the unit is running. When the amount of current drawn by the unit is cut down (as in running), the magnetic field is no longer strong enough to hold the contacts in the closed position.

If the magnetic relay is too small for the unit, the starting contact will remain closed because too much current would be going through the coil. This in turn will cause the protective overload to cut out due to the excessive current being drawn because the starting winding remains in the circuit.

Where the relay is installed by

the factory is still on the unit the relay will not be too small and therefore should not be the cause of this trouble. A replacement relay which has been installed on the unit might have been too small, however, and would cause trouble.

'HOT WIRE' RELAY

The "hot wire" relay is quite simple in construction and operation but is perhaps more difficult to explain. The principal part in the function of this type of relay is a thermal responsive wire element made of nickel chromium alloy which has a comparatively high electrical resistance. Such a relay was shown in Fig. 2.

When the unit is in the off position, the contacts of the hot wire relay are normally closed, which is the opposite of the magnetic relay. When the unit is turned on, the current flows through the nickel chromium wire and into the unit. Having considerable resistance, the wire will heat and expand (lengthen), causing the starting contact to break. The tension and size of the wire govern the ampere rating of this relay.

OVERLOAD PROTECTIVE DEVICES

Most types of starting relays have protective overloads incorporated within them, but some have a separate overload device. This is one of the main reasons why great caution should be used in duplicating the relay previously installed on the machine.

All hot wire type relays have an overload device in the relay itself. Many magnetic types do not.

The overload device in a hot wire relay operates on the same principle as the starting mechanism of the relay. If the draw of current is excessive as it would be in the event of overload, the wire heats up and expands still farther. This causes another set of contacts to break and open the circuit. When the wire cools and contracts, both the starting and overload contacts close at the same instant.

The widely used G-E magnetic relay has a heating coil or element under a piece of bimetal which has a contact at one end. When the current flow is heavier than what the relay is designed for, the heat from the element will cause the bimetal to bend and break contact, opening the circuit.

There is a small magnet in this relay which keeps the contacts open until sufficient tension has developed in the bimetal (as it cools) to overcome the power of the magnet. This makes the contacts close with a snap action.

The Spencer-Klixon overload is used on magnetic relays such as the Westinghouse and Spencer relays which are not equipped with overloads. The Spencer-Klixon overload protects the compressor assembly in two ways. It will cut out if excessive current is drawn. It will also cut out if the unit becomes overheated by continuous running or because it is located in such a position that proper air circulation is blocked off.

Although this type of protective device gives better protection to the unit, it has its disadvantages. This type of overload is designed for specific installations only. It will not give adequate protection on another type of installation even though the horsepower and ampere rating may be the same. When replacing this type of overload an exact replacement is necessary for satisfactory results. This means that the serviceman must carry a number of overloads for replacements.

(To Be Continued)

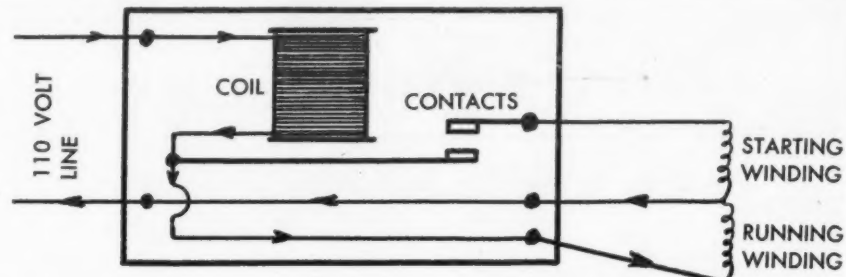


Fig. 3 is a diagram of a magnetic relay to show the path taken by the electric current during the "running" cycle of a hermetic unit. The contacts are in the open position.

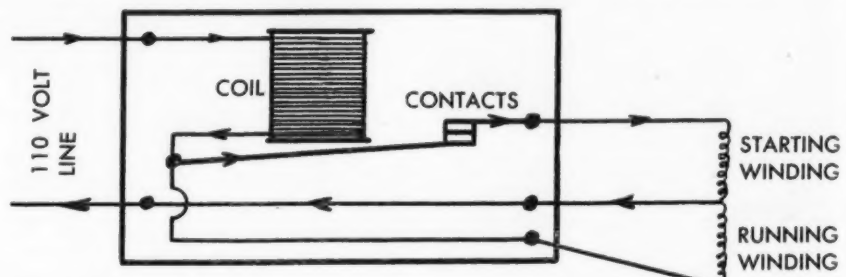


Fig. 4 shows the relay with the contacts in the closed or starting position. When the current is turned on by the control, magnetic force builds up in the coil to pull the contact armature up so the contacts close. As the motor gets up to speed, less force is exerted by the coil. This lets the contacts open and the motor goes on the running winding.

Tropicana Hotel To Get 60-Ton Cooling System

MIAMI BEACH, Fla.—Contract for the air conditioning installation in another new Florida hotel has been awarded to the Airko Air Conditioning Co. here, an authorized dealer for the United States Air Conditioning Corp.

A 60-ton cooling system will be installed in the Tropicana hotel, under construction at 15645 Collins Ave., Dade County.

The new T-shaped building, which will contain 72 guest rooms and efficiency apartments, a lobby, and coffee shop, is being erected by

George Winston Construction Corp., who is general contractor for Sebeco Corp.

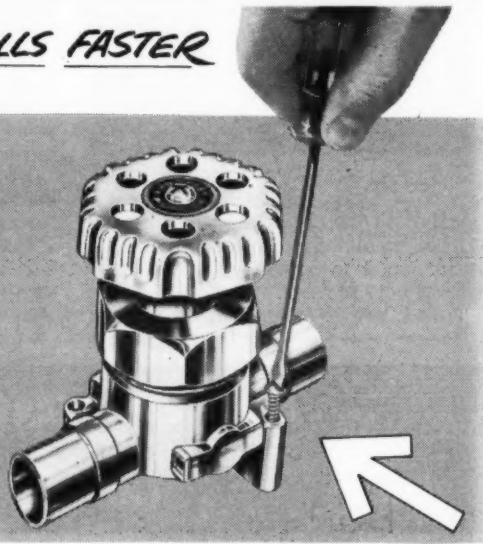
Two 30-ton UsAirc refrigerated "Kooler-aire" dual circuit air conditioners will be used to cool the new hotel. Each guest will be able to adjust his room temperature to his individual taste with a manual control.

MISSING SOMETHING?

More and better useful information is yours for the asking. See "What's New" page.

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It holds the screw while you drive it!
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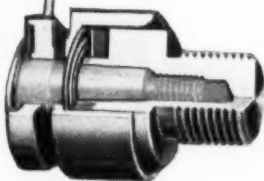
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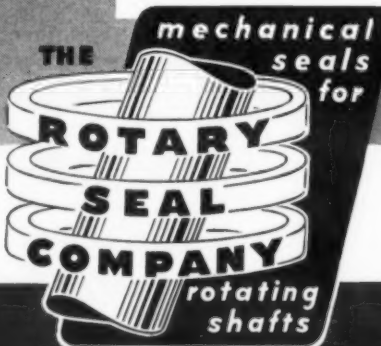
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Current Literature Available

To obtain further information on the literature listed below, please refer to key number preceding listing. Please use the "Information Center" form on "What's New" page.

40-Page Kinetic Book Tells Story of 'Freon'

—KEY NO. M-440—

WILMINGTON, Dela.—An illustrated story of the development, manufacture, properties, and uses of the "Freon" fluorinated hydrocarbon compounds has been published by the Kinetic Chemicals Division of E. I. du Pont de Nemours & Co. here.

The 40-page, glossy paper booklet is entitled "Freon—Safe Refrigerants and Propellants." It is being offered to architects, consultants, contractors, designers, engineers, and others associated with or interested in the air conditioning and refrigeration industry and to those interested in the aerosol field.

One feature of the book is a detailed listing of the general characteristics of all "Freon" refrigerants. Items listed include chemical formula, molecular weight, boiling point, melting point, critical temperature, critical pressure, color, odor, toxicity, and flammability.

Westinghouse Offers Guide for Home Builders

—KEY NO. M-441—

PITTSBURGH—"Plan, Equip, Promote, and Sell" is the theme of a new 20-page booklet available from the Westinghouse Electric Corp. as a guide for home builders and contractors.

To help the builder make his house a more attractive package, this booklet offers—through photographs, layout sketches and diagrams—electrical-planning ideas for kitchen, laundry, lighting, and heating, as well as wiring.

Also included is a section on planned health features in the home, it is pointed out.

The booklet stresses that planned electric kitchens and laundries are becoming a "must" in the modern home. It provides illustrations of

kitchens having work centers arranged in logical order, and gives several good-to-know points on planning new kitchens or remodeling the old.

Lighting that combines beauty with utility; wiring that is adequate for today's and tomorrow's needs; electric heating for bathroom and other parts of the house; and built-in health features are emphasized as sales features that the builder can incorporate into his house.

A copy of booklet B-4760, "Electrical Planning for the Modern Home," is available from Westinghouse.

Pamphlet Presents 200 New Sales Ideas

—KEY NO. M-442—

NEW YORK CITY—Two hundred unusual sales ideas developed during the past several months have been compiled in booklet form by the N. Y. Journal of Commerce.

Titled "200 New Ways To Sell More Goods," the 44-page pamphlet is a revised and enlarged version of an idea-reservoir which proved highly popular last year. It is available for 50 cents a copy from the publication. Highlighting the current edition are 20 "Profitable New Twists," 14 "Inducements That Pay Off," 25 ideas for "Sales Via New Services," 19 "Profit Making Tie-Ins," 18 new ways of "Dressing Up The Package," 14 "Effective Give-Aways," and eight "Trade Show Eye-Catchers."

Sections on "New Vending Devices," "New Ad Media," "Novel Ad Twists," "Target-Salesman," "Untapped Sales Outlets," and "Displaying For Profit" round out the easy-to-reach booklet.

Each of the new ideas described in the booklet is "an actual case history, tested for effectiveness in the market," the newspaper said. The selections were made with a view to their adaptability to both large and small organizations in a wide variety of fields.

Eastern Stainless Steel Publishes Handbook

—KEY NO. M-443—

BALTIMORE—Eastern Stainless Steel Corp. here has published a "Handbook for the Fabricator" covering its stainless steel sheets and plate of the chrome-nickel types.

The 128-page volume, profusely illustrated, tells the composition, properties, and applications of these types of stainless steel and includes detailed technical data for the fabricator.

Buyers Guide Covers All-State Welding Line

—KEY NO. M-444—

WHITE PLAINS, N. Y.—A new 32-page booklet has just been issued by All-State Welding Alloys Co., Inc., here, under the title, "Buyers Guide to the Complete Line of All-State Alloys and Fluxes for Welding, Brazing, Soldering, Cutting, Tinning."

The booklet tells everything a buyer needs to know to select the particular alloys and fluxes that best meet his needs. The material is organized and cross-referenced so that right selection is "virtually automatic."

All current All-State products are covered, including several new ones recently developed. Of particular interest in material production is a new aluminum solder rod for soldering iron application, a premium silver brazing rod and a silver brazing rod made especially for carbide tool tipping.

Westinghouse Book Describes Hermetics

—KEY NO. M-445—

BOSTON—Detailed description of the 2, 3, 5, and 7½-hp. hermetically sealed refrigeration compressors and condensing units is given in a bulletin available from the Westinghouse Electric Corp.

Features of the types CLS-74, -110, -188, and -282 compressors and condensing units are described and illustrated in detail. Specification data is complete.

For a copy of Descriptive Bulletin 101-110, Westinghouse Refrigeration Compressors—2, 3, 5, and 7½ hp., write this newspaper.

16-Page Wabash Catalog Presents Entire Line

—KEY NO. M-446—

CHICAGO—Its entire line of refrigeration parts and accessories is listed in a new 16-page catalog (No. 511) published by Wabash Mfg. Co. here.

Of particular interest to refrigeration contractors and servicemen is an expanded line of all-brass driers which now come in the ½-in. SAE fitting. In addition, the company is introducing 1, 3, and 5-oz. packages of "Easy Flow" silver solder, according to Ralph Caplan, sales manager.

New Brochure Explains Automatic Doors, Gates

—KEY NO. M-447—

DEARBORN, Mich.—A brochure on modern automatic operating equipment for doors and gates was announced recently by Robot Appliances, Inc. here.

By means of text, pictures, and diagrams, the literature shows what has been done in this field in the past 20 years and what makes the use of automatic operating devices constantly more necessary to modern living and working.

The brochure is available free from the company through this newspaper.

WANTED CHIEF ENGINEER

Commercial Refrigeration

For well known West Coast Firm, take full charge of engineering department. Must know refrigeration systems, testing, cabinet design and production methods. Please address your reply to P.O. Box 95, Huntington Park, Calif.

Revco Folder Features 15-Cu. Ft. Food Freezer

—KEY NO. M-448—

DEERFIELD, Mich.—Included in new 1951 Chill Chest literature is a three-color, die-cut piece featuring its 15-cu. ft. food freezer, according to Revco, Inc. here. A consumer hand-out piece and envelope stuffer, the folder (ES15-51) is available to all Chill Chest dealers.

Yale Catalog Describes Handling Equipment

—KEY NO. M-449—

PHILADELPHIA—A new comprehensive 44-page catalog of materials handling equipment has been released by the Yale & Towne Mfg. Co.'s Philadelphia division.

Subjects covered include a general description and application data on Yale's gas and electric fork lift trucks, motorized hand trucks, hand lift trucks, and hand and electric hoists. One section describes attachments for Yale industrial trucks.

3 Use-Value Booklets Prepared by Hotpoint

—KEY NO. M-4410—

CHICAGO—Three new use-value presentations for home economists working with Hotpoint appliances for distributors, dealers, electric companies, and schools have been prepared by the Hotpoint Institute.

The booklets cover ranges, laundry

appliances, automatic dishwashers, and food waste disposals.

William E. Macke, merchandising manager, said that these are the most comprehensive yet developed by the company, and give a full explanation of the use and care of the appliances.

Use value presentations explaining product features from the housewife's point of view are getting more attention because home economists are playing an increasingly important part in consumer programs, use-value home service training, home calls, and dealer floor demonstration.

'How To Write a Speech' Authored by Hegarty

—KEY NO. M-4411—

NEW YORK CITY—Entitled "How to Write a Speech," a new book written by Ed. J. Hegarty, director of sales training of Westinghouse, recently came off the press.

Published by McGraw-Hill Book Co., the book has 30 chapters and more than 220 pages covering the planning and writing of any type of speech. It includes several examples of speeches on the advantages of appliances.

This is the fourth book written by Hegarty. The others are "How to Run a Meeting," "How to Run a Sales Meeting," and "Building a Sales Training Plan."

Hegarty is also the author of a book on sales training, in the "Reading Course in Executive Technique" put out by Funk & Wagnalls Co. In addition, he contributed a chapter on sales meetings to the "Sales Executives Handbook."



NEW 1951 Self Service FROZEN FOOD DISPLAY CABINETS



Model SG-20. Capacity 870 standard frozen food packages. Life-time construction of heavy gauge steel. High gloss, gleaming white finish. Full-color, three-dimensional photographs.



Sales-conscious business men catering to the public can't deny that beauty attracts. That is why ACE is their choice when they want to enjoy maximum frozen food sales. ACE cabinets are beautiful as well as super-efficient . . . and built to give years of trouble-free service. Frozen foods move at a terrific pace . . . if they are merchandised in an ACE! Literature on request.

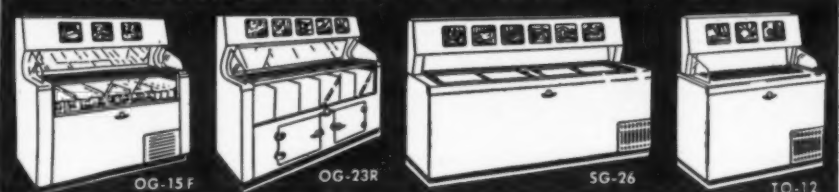
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IN COOLING WATER controls scale and corrosion

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FREE AIR CONDITIONING BOOKLET

discusses realistic, practical ways to solve water troubles. Write for it. If you have a specific problem, tell us about it . . . and see how easy it is to solve with Micromet.

CALGON, INC.

HAGAN BLDG., Pittsburgh 30, Pa.

Refrigeration Problems

and their Solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

Detecting Refrigerant Leaks (4)

Probably the most sensitive of all methods of detecting leaks of the halocarbon refrigerants (the "Freons," methyl chloride, methylene chloride—those that contain chlorine, fluorine, or other halogens) is the electronic type. In fact, at its most sensitive setting, it is too sensitive for other than laboratory use, for it picks up vapors from other nearby materials, such as solvents, paints, and similar materials that may contain one of the halogens.

Essentially it consists of two platinum parts as shown in Fig. 1. The outer part is a platinum cylinder to which is connected an electric current in such a manner that the cylinder is negatively charged to 350 volts.

Inside this platinum cylinder, but separated from it by an air gap, is a small coil of platinum wire called the "cathode," which is electrically heated to a temperature of from 1,560° F. to 1,740° F., so that it is incandescent—that is, red-hot to white-hot.

The other side of the 350-volt current is connected to this hot platinum coil, so that it is positively charged. Thus, the two platinum parts, the hot cathode, and the cylinder are not in a glass tube and there is air around them instead of a vacuum.

However, the two platinum parts, the hot cathode and the cylinder, are put inside a small tube, near one end, which is open. To the other end of the tube is connected a small suction fan that draws air into the open end of the tube, then between the hot platinum coil and the plati-

num cylinder, and finally out through the fan, as shown in Fig. 2.

Ordinarily, there is little current flowing across the air gap between the hot wire and the cylinder, for the resistance of the air is very high; so the very sensitive electric meter shows no reading.

HALOGEN REFRIGERANT BECOMES IONIZED

If, however, the air drawn through the tube contains any gas that has a halogen in it (chlorine, fluorine, etc., such as are contained in the "Freons," methyl chloride, etc.) the halogen is decomposed, and tiny particles called "ions," which are positively charged electrically, are released. Being positively charged, they are attracted to the negatively charged 350-volt platinum cylinder.

Thus, the flow of these positive ions from the hot platinum cathode to the cylinder, forms a path for electricity to flow from the hot wire to the cylinder. That is, the resistance of the air gap is reduced by this flow of ions resulting from the presence of the refrigerant in the air.

This increase in the flow of electricity across the air gap is amplified by electronic tubes similar to radio tubes, until it is strong enough to be measured by the sensitive electric meter, or if it is desired, the small flow of current can be further amplified until it will light lights, blow horns, or operate other means for announcing a leak.

The more gas there is in the air drawn through the tube, the greater will be the number of ions flowing across the gap, the lower will be the resistance, and the greater will be the electric current as measured by the sensitive meter.

INDICATES SIZE OF LEAK ALSO

Thus, the reading of the meter not only shows that there is refrigerant gas in the air being drawn through

the tube, but it also shows relatively, how much gas there is in the air.

So if the open end of the tube is presented to a joint to be tested, the meter not only shows whether or not any refrigerant is escaping, but it also shows relatively how big a leak it is. Moreover, by varying the heat of the hot wire cathode, and the voltage on the cylinder, it is possible to vary the sensitivity of the apparatus. If the wire is heated very hot, and/or if the voltage on the cylinder is increased, this type of tester can be extremely sensitive.

So by setting a small selector switch, it is possible to make the detector highly sensitive for very careful laboratory tests; moderately sensitive for ordinary testing for normally small leaks; and not very sensitive for locating large leaks, even though the air around the equipment being tested has quite a little refrigerant or other gas in it.

The medium setting, that is, the setting for medium sensitivity, is the one normally used for testing refrigerating equipment. It compares with, but is even somewhat more sensitive to small leaks, than the halide torch or halide candle.

The electronic leak detector as above described is especially adapted to shop or factory use, as the amplifiers, transformers, etc., tend to make it somewhat more bulky and less portable than is desirable for ordinary field leak-testing service.

THE SUBMERSION TEST METHOD

A leak test method widely used in shops and factories, consists in putting a pressure of dry air or nitrogen into the part to be tested and then submerging the part in a lighted tank of clear water. Bubbles rising from the part and up through the water, indicate a leak.

The tank must be brilliantly lighted, preferably by waterproof lights in the sides of the tank below the water level, as well as overhead. Unless the water is clear and brilliantly lighted, the very fine strings of tiny bubbles may escape detection.

One of the so-called "wetting agents" should be put into the tank of water, so as to break up the surface film on the part being tested. Otherwise, small bubbles may not be able to break through.

The amount of pressure is important, but there can, of course, be no set rule. Some types of equipment may be able to stand 300 p.s.i.; others no more than 100 p.s.i. Obviously, the higher pressures should be used whenever possible, for small leaks show up more readily with the higher pressures.

In factories, assemblies that are too large to test in a submersion tank, are sometimes leak tested by putting dry air pressure of 100 to 300 p.s.i. on them and then testing the joints with a soap-and-water solution.

A variation of this method previously referred to in this column, is to put a pressure of about 50 p.s.i. of "Freon-12" in large assemblies and then add dry air pressure to build the total pressure up to 100 p.s.i. or over, and then go over the joints with a halide detector—electronic, torch, or candle.

Next we will discuss the use of ultra-violet light in detecting leaks in refrigerating systems.

(To Be Continued)

G-E Employee Awarded \$2,185 For Suggestion

SCHENECTADY, N. Y. — Once again, an employee of General Electric Co.'s Erie Works Refrigerator Division has topped the top honor in the suggestion award program.

In 1949, a worker in the division won \$2,750—the highest single award made that year under the program. John R. Davis, has achieved the same honor for 1950.

Davis received \$2,185 for a suggestion which eliminated a subassembly operation in the manufacture of refrigerators. Philip W. Robinson, also of the Refrigeration Division at Erie, Pa., won the second highest award.

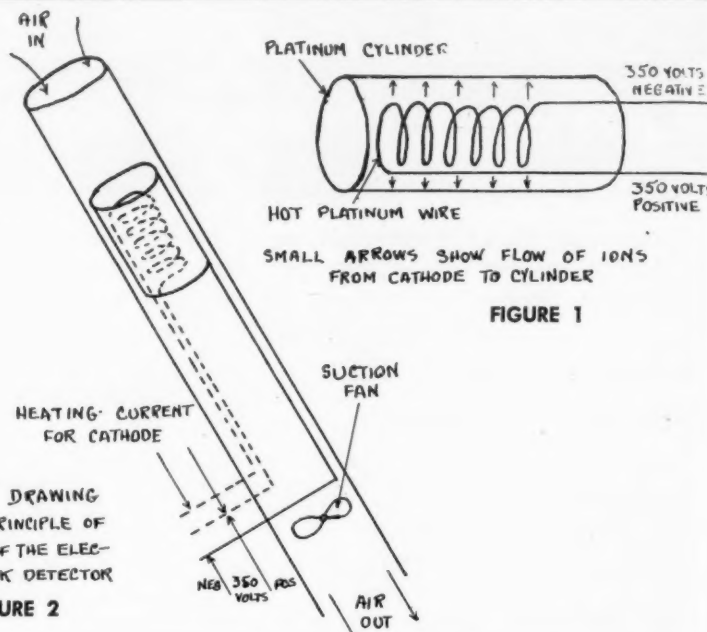


FIGURE 1
SCHEMATIC DRAWING
SHOWING PRINCIPLE OF
OPERATION OF THE ELECTRONIC LEAK DETECTOR
FIGURE 2

J. H. Skipper Heads York Southern Sales District

ATLANTA—J. H. Skipper has been promoted from a sales supervisor to district commercial sales manager of York Corp.'s southern district here, according to John R. Hertzler, vice president and general sales manager of the air conditioning and refrigeration firm.

He replaces W. B. Cooper, who resigned recently.

Skipper, a native of Arkansas, was from 1926 to 1929, field supervisor with Frigidaire, and from 1929 until 1932, sales supervisor with the W. P. Galloway Co., Frigidaire distributor in Little Rock.

From 1932 until 1934, he was with Herbert Roberts, Frigidaire distributor in Ft. Smith, Ark., where he served as the manager of the refrigeration and air conditioning department.

From 1941 until 1945, Skipper was with the U. S. Division Engineer Office at Columbus, Ohio, and from 1945 until recently, was sales supervisor for York Corp. in the Charlotte, N. C. zone.

Schofield Becomes Dravo Heating Dept. Service Mgr.

PITTSBURGH—C. H. Schofield has been appointed service manager of the heating department of Dravo Corp. here, replacing M. H. Stern who has been assigned as sales engineer in the state of Michigan with headquarters in Detroit.

In his new position, Schofield will be in charge of service and maintenance for Dravo "Counterflo" heaters throughout the country.

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Buffalo Educational Conference Last In Series; Interest Was at High Level

At the final REMA-RSES educational conference and exhibit at Buffalo, N. Y., the Refrigeration Co. claimed a "first time ever seen" in its demonstration of refrigerant actually being condensed. Herman Goldberg of Standard, R. G. Caston and George A. Mathes of Torco to watch as Dwight Orr of the company pair to the specially made "window" section in a condenser.



Berthold Rossnagel of Henry Valve explains a feature of a valve to Albert Moors of Worcester, Mass., while Mrs. Moors thumbs through a catalog. Jesse C. Stockton of Lafayette, Ind., is engrossed in the display while William Weaver of Toronto confers with C. C. Ryan (extreme right) of Dole. That's Gordon Wheeler of Henry giving the display the once-over.



Cut-away model of a carbulator proves of great interest to Bernard McCluske of Emergency Refrigeration Service, Pittsburgh, who with Mrs. McCluske gets a detailed explanation from James W. Archibald (left) of Temprite.



James Palmer of Olean, N. Y., and Mr. and Mrs. John Schlick of Vernon Center, N. Y. listen to an exposition on refrigerated cold-plate construction by C. K. Davis of Kold-Hold Mfg. Co. Many service engineers brought their wives to the exhibits.



"Twins view a twin" might be the title of this picture as Frank and John Grant identical twins from Toronto, Ontario, view a Lehigh twin-cylinder 1/2-hp. automatic highside defrosting condensing unit. Chan Coombs (left) and Ollie Kesti (right) of Lehigh explained the operation of the system.

Government Contracts

PROCUREMENT INFORMATION

The following is a list of proposed procurements issued by the various indicated U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request to the purchasing office under which the purchase is listed in this Synopsis. Be sure to identify completely the bid invitation you wish by including in your request the item description, the invitation number or reference number and the opening date. This will save time in filling your request. For reasons of economy, specifications are normally not included with the bid invitations unless the specification is a new one. First time bidders on a particular item should request a copy of applicable specifications and drawings at the time the request for a bid set is made.

DEPARTMENT OF DEFENSE

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Raritan Arsenal; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices. Ordnance District Offices do not have information on any other purchases.

Description	Quantity	Invitation No.	Opening Date
Supply Officer, Philadelphia Naval Shipyard, Philadelphia 12, Pa., Attn.: Purchase Section			
Valves, Globe, CMO Forged Steel, Threaded	40 ea	S-7151	24 Apr 51
Valves, Globe, CMO Forged Steel, Welded, to Have Socket Weld Ends as Approved by the A.S.A.	40 ea	S-7151	24 Apr 51
Commanding Officer, Naval Supply Depot, Mechanicsburg, Pa., Attn.: Code 778B			
Regulator, Temperature, Valve To Be In Accordance with Buships Contract Spec. CS-T-374 DTD 15 Nov. 1948 Class A, Buships Dwg. 399679 No. 928-3M Size 1 and 1-1/2"	40 ea	71-20080E	30 Apr 51
Refrigeration Fittings, Various Types	13,900 ea	763759C	4 May 51
Pipe and Refrigeration Fittings, Various Types, To Be In Accordance with Various Govt. Specs.	5735 ea	71-20122	9 May 51
Supply Officer, Naval Proving Ground, Dahlgren, Va., Chamber, Temperature Test	1 ea	1-43	1 May 51

Navy Captain In New Connor Engineering Post

DANBURY, Conn. — Captain Thomas H. Urdahl, USN (ret) has been elected vice president of the W. B. Connor Engineering Corp. here, manufacturer of air conditioning and ventilating specialties.

Captain Urdahl has been active in the development and design of electrical and power equipment and systems, especially in the field of heating, ventilating, and air conditioning, over the past 25 years.

During World War II he was Chief of the Air Conditioning Section, Bureau of Ships, USN, in which position he was responsible for the development, design practices, and equipment affecting temperatures and other phases of atmosphere control on all types of Navy vessels.

This includes development and application of the method employed in the "mothballing" program for preservation in readiness of the world's largest reserve fleet.

Captain Urdahl has been an active member of the engineering societies promoting research in heating, ventilating, and air conditioning as it applies to both shore and marine construction. He is a member of the Building Research Advisory Board of the National Research Council.

GENERAL SERVICES ADMINISTRATION

Description	Quantity	Reference No.	App. Bid Date
General Services Administration, 1114 Commerce St., Dallas, Tex.			
Fans, Electric, Air-Circulators 12"	200 ea	FW-13573	4-25-'51
Regional Information Officer, Region 3, General Services Administration, Washington 25, D. C.			
Cooling Tower, 5-Ton, Spec. Attached	1 ea	1071	4-25-'51
Chief, Purchase Division, Federal Supply Service, General Services Administration, U. S. Court House, Seattle 4, Wash.			
Globe Valves, Bronze, ARR Plug Type, 300 Lb. Needle Point Globe Valve, 300 Lb.	300 ea	2-M-5720-1	4-19-51

U. S. DEPARTMENT OF COMMERCE

Description	Quantity	Reference No.	App. Bid Date
Chief, Procurement Section, National Bureau of Standards, Conn. Ave. and Van Ness St., N. W., Washington, D. C.			
Constant Temperature Bath For Polymerization Studies	1 ea	B-2-2562-51	4-26-51
Valve, Gate, Brass	24 ea	B-2-2534-51	4-20-51
Fittings, Surface, Duct	60 ea	B-2-2534-51	4-20-51
Gauge, Pressure	24 ea	B-2-2556-51	4-20-51
Coupling, Brass	30 ea	B-2-2556-51	4-20-51

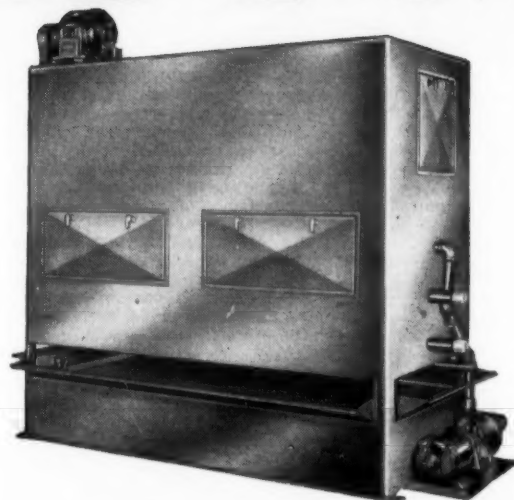
ECONOMIC COOPERATION ADMINISTRATION

Description	Quantity or Value	ECA Purchase Authorization	Closing Date
Ministry of Agriculture, Reconstruction Procurement Committee, 10 Filiklinon St., Athens, Greece			
Refrigerator Rooms, See SBC 363 for Full Specs.			25 Apr 51

CONTRACTS AWARDED AS OF APRIL 11, 1951

Description — Contractor and Address	
U. S. Navy Purchasing Office, 1206 South Santee St., Los Angeles 15, Calif.	
Hardware Equipment, Compression & Flared Tube Fittings, Couplings, Refrigeration Fittings, Elbows, Gauges, Etc.—Griffith Pipe & Supply Co., Inc., 4585 S. Alameda St., Los Angeles 11, Calif.	
Department of the Navy, Bureau of Ships, Washington, D. C.	
Valves, Plug Rotary—Kerotest Mfg. Co., 2525 Liberty Ave., Pittsburgh 22, Pa.	
Navy Department, Aviation Supply Office, Oxford Ave. and Martin's Mill Rd., Philadelphia 11, Pa.	
Desiccant Containers: Zinc Coated Sheet Steel with Handles—The Davison Chemical Corp., 101 N. Charles St., Baltimore 3, Md.	

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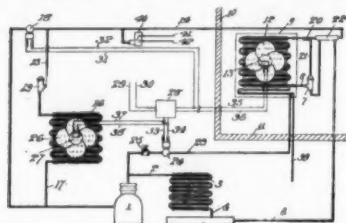
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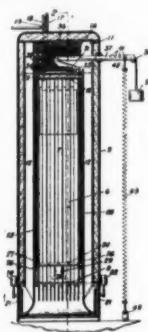
PATENTS Weeks of Nov. 21 & 28

2,530,440. DEFROSTING SYSTEM FOR REFRIGERATING APPARATUS. Otto J. Nussbaum, Trenton, N. J., assignor to Kramer Trenton Co., Trenton, N. J., a corporation of New Jersey. Application July 26, 1947, Serial No. 763,982. 13 Claims. (Cl. 62-116.)



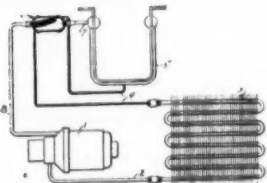
1. Apparatus of the character described comprising, a compressor, a condenser, a refrigeration chamber, an evaporator located within said chamber, a second evaporator located without said chamber, conduits interconnecting the two evaporators and the compressor, pressure reducing means in the conduit which connects the two evaporators to permit fluid to flow from the outlet of said first evaporator either directly to the inlet of the compressor or by a course passing through the pressure reducing means and said second evaporator, and a hot gas line connecting the outlet of the compressor with the inlet of said first evaporator without passing through the condenser.

2,530,598. REFRIGERATING SYSTEM HAVING AIR CIRCULATING MEANS. Harold E. Christman, San Jose, Calif. Application May 5, 1947, Serial No. 745,917. 10 Claims. (Cl. 62-91.5.)



1. A refrigerator having an insulated casing, a walled chamber formed in said casing and spaced therefrom, means for moving a current of air through said casing and over the outer wall of said chamber, means within said chamber for causing circulation of a refrigerant over the inner walls of said chamber through the movement of the refrigerator as a whole, said means including a resilient refrigerant carrier, and a pivoted arm mounted in said casing, one end of said arm overlying said carrier, the other end of said arm extending out of said casing, cables connecting to said carrier and reeved over said arm and having a counterbalance connected to the free end of said cable to counterbalance the refrigerant load mounted on said carrier.

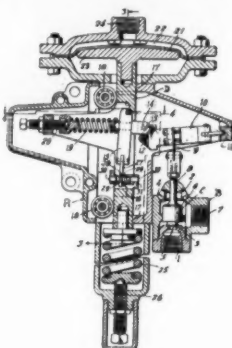
2,530,648. COMBINATION ACCUMULATOR, HEAT EXCHANGER, AND METERING DEVICE FOR REFRIGERATING SYSTEMS. Martin T. Cahenill, Jr., Chicago, Ill., and Glenn Muffly, Springfield, Ohio, assignors to The Harry Alter Co., Chicago, Ill., a corporation of Illinois. Application Sept. 26, 1946, Serial No. 699,490. 9 Claims. (Cl. 62-126.)



1. A combined metering tube and heat exchanger unit for connection in a refrigerating system, including a housing arranged for connection near the evaporator in the suction side of the system, and a metering tube for connection in the pressure side of the system, said tube having a relatively large portion thereof inside said housing, said portion on the incoming side affording relatively low re-

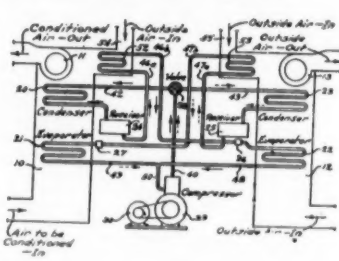
striction and on the outlet side being coiled into a coil of small inside diameter to provide high restriction to the flow of refrigerant.

2,530,652. SNAP-ACTION CONTROL MECHANISM. Verner F. Davi, West Orange, N. J., assignor to Atlas Valve Co., Newark, N. J., a corporation of New Jersey. Application Jan. 31, 1948, Serial No. 5,671. 1 Claim. (Cl. 74-110.)



A snap-acting control mechanism including a casing, a control device comprising a yoke having a transverse opening therethrough intermediate its ends, guide means adjacent the ends of said yoke for reciprocally mounting the yoke in said casing, an element to be controlled disposed at one side of said yoke and movable alternately in opposite directions, an operating lever at said side of said yoke and fulcrumed to swing in the directions of reciprocation of said yoke, a connection between said operating lever and said element to actuate said element upon swinging of said lever, a trip member mounted on said yoke within said transverse opening to move in directions transverse to the direction of movement of said yoke, said operating lever having two oppositely inclined meeting surfaces and said trip member having a part to contact and move along said surfaces, an abutment on said yoke at the side thereof opposite said operating lever, and a spring interposed between said abutment and said trip member and normally pressing said part of said trip member into yielding contact with one of the other of said surfaces, whereby upon movement of said yoke a predetermined distance in either of opposite directions said portion of said trip member moves successively along one of said inclined surfaces to the meeting point of said surfaces and then into contact with the other said surface whereupon said trip member is actuated by said spring to swing said operating lever in one direction, said element being guided in its movement, said operating lever being fulcrumed at one end on a knife-edge bearing and having said inclined surfaces at its other end, said connection between said operating lever and said element being a strip of spring material, and said element and said trip member being associated with said operating lever so as to hold the lever against displacement from said knife-edge fulcrum bearing.

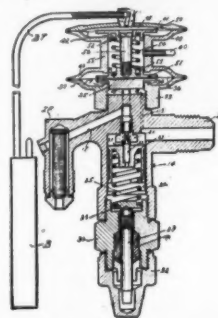
2,530,681. REVERSIBLE CYCLE SYSTEM. Gilbert E. Clancy, Los Angeles, Calif., assignor to Drayer-Hanson, Inc., Los Angeles, Calif., a corporation of California. Application Nov. 18, 1947, Serial No. 786,608. 17 Claims. (Cl. 62-129.)



1. In a reversible refrigeration system, two independent refrigerant circuits, each having a relatively high pressure portion including a refrigerant condenser, a relatively low pressure portion including a refrigerant evaporator, and each having a fluid connection between the two said portions including means adapted to limit the rate of refrigerant flow from the high pressure portion to the low pressure portion, and means including a refrigerant

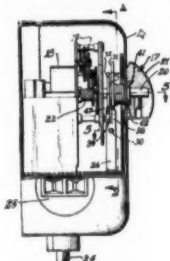
compressor for transferring refrigerant vapor from the low pressure portions of both refrigerant circuits selectively to the high pressure portion of either of the circuits, those portions of the two circuits lying between the respective condensers and evaporators being mutually distinct.

2,530,706. LOAD LIMITING MEANS FOR USE WITH REFRIGERATION AND OTHER VALVES. Harold T. Lange, Webster Groves, Mo., assignor to Sporlan Valve Co., St. Louis, Mo., a corporation of Missouri. Application Aug. 30, 1946, Serial No. 693,973. 4 Claims. (Cl. 238-92.)



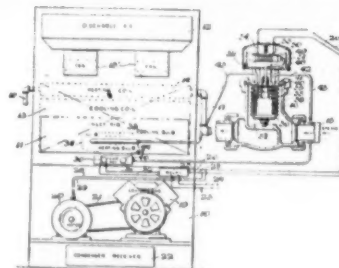
1. In a thermostatic expansion valve assembly in and for the control of a compressor-condenser-evaporator system, and including a fluid motor having a diaphragm movably responsive to thermal requirements of the system, the combination therewith of a casing constituting an attachment adapted to be carried by the valve assembly and providing therefor inner and outer enlarged chambers and an intermediate chamber having a cylindrical wall, a flexible diaphragm secured in said inner enlarged chamber, the fluid motor being connected to the outer enlarged chamber with the diaphragm therein operative in said outer chamber, the diaphragms being of substantially equal areas, an element carried in the valve assembly to extend between said flexible diaphragm and the expansion valve for translating motion of the latter diaphragm to the expansion valve, a spring located in the intermediate chamber and acting to separate the said flexible diaphragm, and the diaphragm of the fluid motor, a buffer plate operatively associated with each diaphragm and having a sliding contact at the cylindrical wall of the intermediate chamber, said buffer plates providing seats for the opposite ends of said diaphragm separating spring, and means between said buffer plates limiting the extent of their possible separation and hence possible separation of said diaphragms, said means being adapted to permit a range of relative movement of said buffer plates, within such limit of possible separation.

2,530,985. TIMER FOR AUTOMATICALLY DEFROSTING REFRIGERATORS. David Morrison, Manitowoc, Wis., assignor to Paragon Electric Co., Two Rivers, Wis., a corporation of Wisconsin.



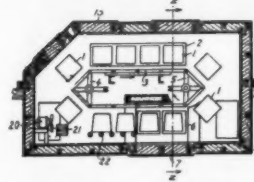
3. In a timer, a switch comprising two long spring fingers, anchored at one end, that contact each other whenever left free to do so, a rotatable shaft near said fingers and at right angles to the plane in which the fingers move as the switch opens and closes, a pair of like cams on said shaft, one cam being fixed on the shaft and the second cam being frictionally held so as to yield under a predetermined turning force in either direction and move angularly relatively to the first cam, a manually operable part on the second cam for applying thereto such a turning force, a pointer on one end of the shaft, each finger having at its free end a part that rides on one of the cams, each cam having a low section that leaves the corresponding finger free and a high section that presses that finger farther away from the shaft, said high sections being of the same radius to cause the fingers to remain in contact with each other while engaged with the high sections of the cams, a motor adapted to run continuously in one direction, and a connection between the motor and the shaft to allow the shaft to be turned in said direction either by the motor, to open and close the switch, or by the pointer, independently of the motor, to set the timer and determine the angular position of the shaft at which the switch opens.

2,531,037. CONTROL FOR AIR CONDITIONING SYSTEMS. William J. Hajek, Knoxville, Tenn., assignor to Robertshaw-Fulton Controls Co., Knoxville, Tenn.



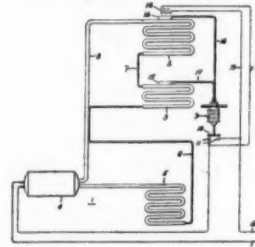
1. In a control for an air conditioning system having air heating and air cooling coils, a valve controlling the flow of the heating medium to the heating coil, a refrigerating unit for supplying a cooling medium to the cooling coil, an electric motor for driving the refrigerating unit, and an electric circuit for the motor, a thermostat operatively connected to said valve and subjected to the temperature of the air flowing over said coils for opening and closing said valve, and means associated with said thermostat and actuated by the closure of the motor circuit for operating said thermostat to maintain said valve in closed position as long as said motor circuit is closed.

2,531,067. FREEZING APPARATUS. Tharald Warberg Tharaldsen, Drammen, Norway. Application March 27, 1947, Serial No. 737,541. In Norway Nov. 28, 1945. 3 Claims. (Cl. 62-114.)



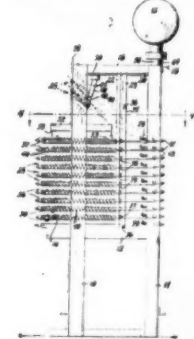
1. An apparatus for freezing food products in containers of heat conductive material, comprising spaced plane refrigerating surfaces and conveying means for conveying the said containers between the said refrigerating surfaces with their side walls in sliding contact with the surfaces, the conveying means comprising an endless chain to which each container is connected by means of substantially parallel links which by one end are pivotally mounted on the chain and by the other end pivotally attached to the container, and which lie at an acute angle to the chain in the direction of movement of the same so that the links upon increasing resistance against the movement of the container apply a pressure component to the same directed outwardly from the chain.

2,531,136. CONTROL ARRANGEMENT FOR REFRIGERATING SYSTEMS. Lowell M. Kurtz, Erie, Pa., assignor to General Electric Co., a corporation of New York. Application Dec. 28, 1949, Serial No. 135,408. 11 Claims. (Cl. 62-4.)



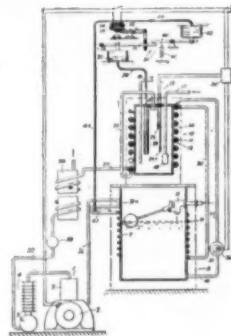
1. A refrigerating system including a condensing unit, a control system for starting and stopping said condensing unit under predetermined maximum and minimum temperature conditions, said control system including a bellows and two temperature-responsive bulbs in communication with said bellows, said system having a volatile fluid therein, the first of said bulbs being disposed in a cold zone and the second of said bulbs being disposed in a warmer zone, a heater disposed adjacent said first bulb, and means actuated by said bellows for stopping said condensing unit and simultaneously energizing said heater whereby control of said bellows is transferred from said first bulb to said second bulb.

2,531,210. FOOD FREEZING APPARATUS. Joseph L. Gilson, Hartsdale, N. Y. Application July 2, 1948, Serial No. 37,589. 14 Claims. (Cl. 62-114.)



1. In a freezer, a frame, a row of freezer plates arranged in face to face spaced parallel relation and pivoted on said frame along corresponding edges of said freezer plates to swing about spaced parallel axes arranged in a plane extending along said row whereby any pair of the freezer plates can be swung apart and swung together into said spaced parallel relation and with the articles to be frozen interposed therebetween, a tension spring secured at one end of the free end of each of said freezer plates and at its opposite end to said frame at a point on the opposite side of the pivot axis thereof and in the operative position of said plate being generally in line with said pivot axis, and conduits arranged to supply a refrigeration medium to said freezer plates to maintain them at a freezing temperature.

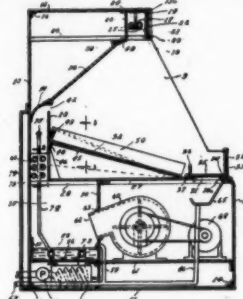
2,531,315. LIQUID COOLING APPARATUS. John Wyllie, Jr., deceased, late of Detroit, Mich., by Margaret B. Wyllie, executrix, Detroit, Mich., assignor to Tempire Products Corp., Detroit, Mich., a corporation of Michigan. Application Aug. 8, 1946, Serial No. 689,249. 5 Claims. (Cl. 62-7.)



1. In liquid cooling apparatus, the combination of a liquid precooler comprising a liquid chamber and a refrigerant expansion chamber in heat-absorbing relation thereto; an instantaneous type liquid cooler comprising conduit means providing a definite path for the flow of liquid to be cooled and a refrigerant expansion chamber associated with the conduit means; means for conducting liquid from the precooler to the instantaneous cooler to replace liquid drawn from the latter; a motor-driven refrigerant condensing unit; refrigerant conduit means for con-

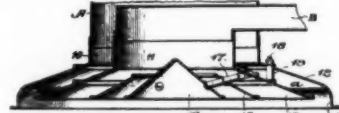
ducting liquid refrigerant from the discharge of the condensing unit to the refrigerant chamber of the instantaneous cooler; means for controlling the passage of refrigerant through the said conduit, said means being responsive to change of pressure in the refrigerant expansion chamber of the instantaneous cooler; means for conducting refrigerant from the expansion chamber of the instantaneous cooler to the expansion chamber of the precooler and from the latter chamber to the intake of the condensing unit; and means for starting and stopping the refrigerant condensing unit responsive to the temperature of the liquid discharged from the instantaneous cooler to start the unit and respond to the temperature of refrigerant discharged from the precooler to stop the unit.

2,531,506. REFRIGERATED DISPLAY CASE HAVING HUMIDIFYING MEANS. Harry Geneck, Spokane, Wash. Application Oct. 29, 1946, Serial No. 706,474



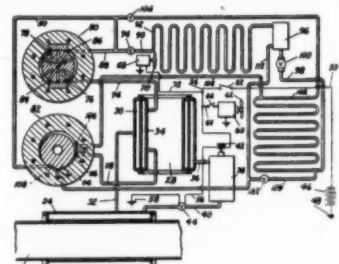
1. A display stand comprising in combination a casing having a rear wall and a lower front, a top wall extending forwardly from the top of the rear wall, a display platform disposed between the front and back walls and spaced from both of them, said platform having an upstanding rear wall, an air distributing box beneath said platform, a fan beneath the platform for forcing air into said box, a screened inlet between the front wall and the front edge of the platform for air to the fan, the front wall having a shield thereon extending substantially above the inlet, said platform having a substantially lower shield at its forward edge for separating produce on the platform from said inlet, an outlet channel for said box extending upwardly between the rear wall of the casing and the rear wall of the platform, a top shield extending forwardly from the back wall of said channel in proximity to and directly over the rear wall of the platform, said shield including adjustable means for varying the amount of air delivered to a particular section of the platform, means in said channel to cool the air, and spray heads in the channel for supplying moisture to the air.

2,531,733. AIR OUTLET DEVICE. Friedrich Honerkamp, New York, N. Y., assignor to Anemostat Corp. of America, New York, N. Y.



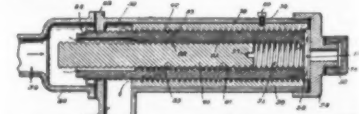
1. Air outlet means comprising two separate air supply ducts to be used, one for the supply of air of one kind and the other for the supply of air of a different kind, the outlet end portion of one of said ducts being disposed within the outlet end portion of the other of said ducts, a pair of members connected to the outlet end portions of said ducts, respectively, and extending laterally therefrom in spaced apart relationship to each other to provide therebetween an air outlet passageway leading laterally from the outer of said ducts, means to cause air delivered from the outer duct through said passageway to be directed forwardly from said passageway, and means to cause air delivered from the inner duct to be deflected laterally outward therefrom.

2,532,012. AIR CONDITIONING SYSTEM. Don E. Dasher, Birmingham, Mich.



1. In a heating and cooling system, a source of heat, a water jacket surrounding the source of heat, a water jacketed liquid container having its jacket connected to the jacket associated with the source of heat, a receiver and a valve connected in series between the jackets, a switch controlled by pressure in the receiver and an electric circuit including the switch and valve.

2,532,019. PRESSURE REDUCING DEVICE FOR REFRIGERATING APPARATUS. Herman M. Goldberg, Chicago, Ill., assignor to Standard Refrigeration Co., Inc., Chicago, Ill.



1. A restrictor valve for refrigerating apparatus for controlling the flow of fluid in a refrigeration system comprising a centrally disposed tube having interior screw threads, a central plug having exterior screw threads engageable with the interior screw threads of the tubular member, the screw threads of one of said members being uniformly flattened to provide a spiral passage of uniform cross-section about the central plug, exterior screw threads on the tube and engaging screw threads on an outer surrounding member, the screw threads on one of said latter members being uniformly flattened to provide a spiral passage of uniform cross-section about the outside of the tube member.

(To Be Continued)

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Low Temperature Systems

Factors In the Design, Selection, and Servicing of Such Equipment

2. Two and Three-Stage Systems Producing -50°F. to -100°F.

This series of articles by Mr. Lopiccolo on low-temperature refrigeration covers the following ground:

Single, two, and three-stage refrigeration applied to low-temperature applications, with discussions of the principles involved in each type, and advantages and disadvantages of each type.

By Thomas Lopiccolo, Vice President, Bowser Technical Refrigeration, Division of Bowser, Inc.

Two and three-stage refrigeration as applied to low temperatures between -50°F. and -100°F. are explained at this point. Fig. 2 gives the refrigeration circuit for two stage compressors, while Fig. 3 shows the circuits where three stages of compression are accomplished within a single compressor. The principles of design are the same, but the difference rests within the condensing units themselves since one manufacturer still continues to apply single-stage machines to multistage combinations, while another manufacturer offers self-contained, two and three-stage compressors.

It is interesting to note that, fundamentally, the system is the same as the single-stage circuit explained but the difference lies within the compression system itself as well as a means of subcooling the refrigerant prior to entering the expansion valve.

This is demonstrated by the inter-cooler and liquid cooler combination separately fed by another expansion valve with the suction in the inter-stage between the two stages of compression. The purpose of this liquid inter-cooler and liquid subcooler is twofold—one is that it provides a means of extracting some of the sensible heat from the liquid refrigerant prior to its entering the expansion valve and the evaporator.

Any heat removed from the liquid at this point results in increased efficiency in the evaporator since less of the refrigerant is lost as far as B.T.U. removal capacity is concerned in flashing in the evaporator. Any flash gas is lost refrigerating effect.

The second function of the liquid subcooler is to provide a cold source of gas at the interstage between the two stages of compression to reduce the temperature of the gas entering the suction of the second stage. By mixing thoroughly with the discharge from the low stage or first stage a considerable amount of the heat of compression is removed and a suction temperature approaching 65°F.

Service problems that are somewhat peculiar to these various types of systems.

Applications in which low-temperature refrigeration has a definite function. This covers many fields related to the defense effort.

This, the second in the series, covers two and three-stage refrigeration systems.

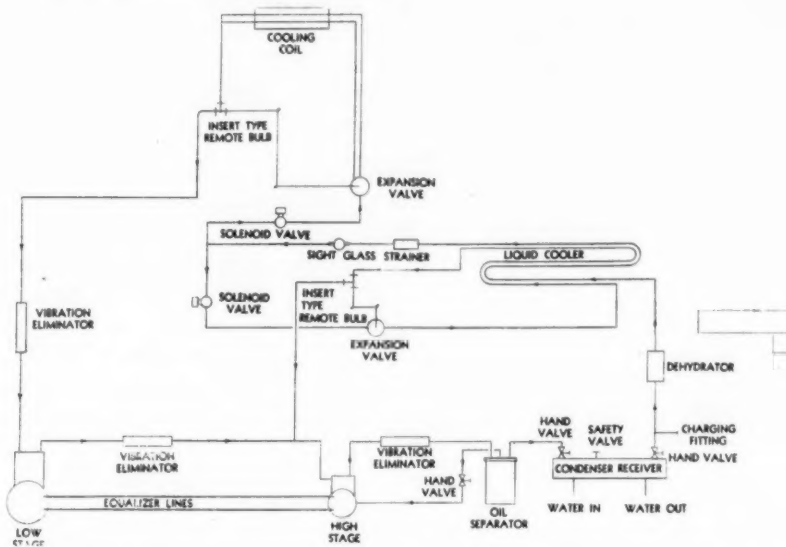


Fig. 2—Piping diagram for two-stage (compound) low-temperature refrigeration system.

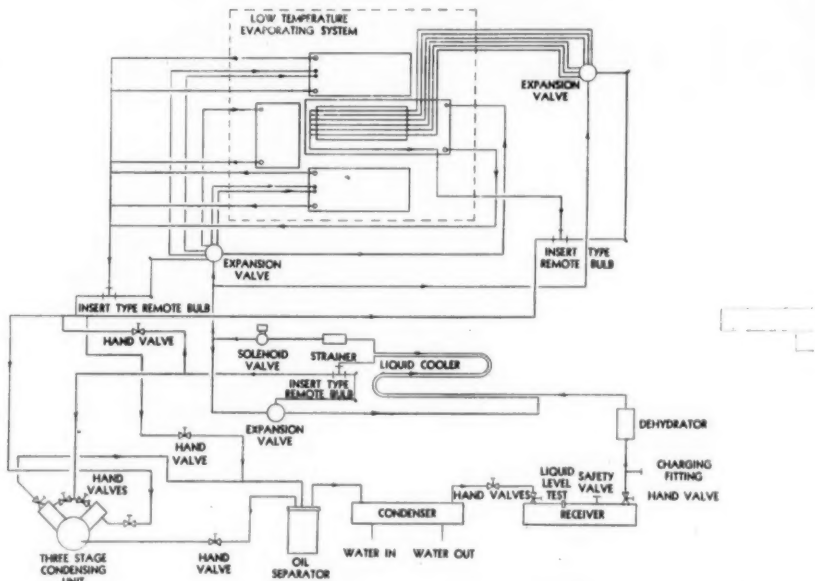


Fig. 3—Piping diagram for three-stage low-temperature refrigeration system with all three stages of compression accomplished by one three-stage condensing unit.

into the second stage is designed for and has been found desirable.

Due to the fact that the refrigerant at low temperature and low pressure is very thin, the first stage compressor must handle, for a given number of pounds of refrigerant circulated, a larger volume of gas than does the second stage whose suction inlet is at a higher pressure than the evaporator.

As a result, an approximate relationship between the first and second stages of a two-stage compression setup is approximately in the volumetric ratio of 3 to 1. That is, the volumetric displacement of the first stage compressor must be approximately three times that of the second stage. This results in an inter-stage pressure of such a value as to provide for almost equal compression ratios in both the stages of compression.

This is a condition which should be designed for and should be maintained when the system is in operation. Any deviation from this combination may result in abnormally high compression ratios on one stage with low compression ratios on the other stage and since we found that high compression ratios result in low volumetric efficiency, we would then lose any benefit, which we would gain by compounding, by losing the capacity of one or both of the machines.

Among the advantages of multi-stage compression is: one, a common refrigerant is used throughout, thus simplifying service and service parts necessary to be kept on hand for maintenance purposes. Another advantage is the flexibility of control, which, in turn, results in more applications in various fields. It is apparent that if the same refrigerant is used throughout the entire system, it is possible to operate the system as

a single-stage arrangement by merely by-passing the first stage of compression.

Thus, the customer could use the system to produce temperatures down to -40°F. as a simple single-stage system and should he desire temperatures below -40°F. , he could merely start up the first stage of compression closing the by-pass around the first stage. This would provide for greater flexibility of temperature modulation as well as increased B.T.U. removal capacity at relatively high back pressures.

Another advantage is that there is no temperature overlap between stages. This will be clearly explained when we discuss the temperature overlap problem in the cascade system, but it should be noted here, that the discharge pressure of the first stage is equal to the intake pressure or suction pressure of the second stage, and since this is true, the overall compression effect from the low stage suction to the high stage compression or discharge is all effective towards producing refrigerating effect.

Among the disadvantages of the two and three-stage compound systems are: one, the limitations to the use of refrigerant with relatively low condensing pressures. Here again, as was explained under single-stage refrigeration, "Freon-12" and "Freon-22" are commonly used, but are the only refrigerants that can be used whose condensing pressures are within the realm of everyday use of piping and fittings.

Another disadvantage of the two and three-stage compound system is that the oil which is circulated with the refrigerant is subjected to extreme temperature and pressure conditions. It must be able to withstand the extremely high temperature of compression as well as the abuse

within the crankcase of the two machines. It must have excellent lubricating qualities while hot and thin and, yet, must be able to pour freely and be wax-free at the low evaporator temperatures. An oil for this range of temperature application has yet to be satisfactorily developed by the petroleum industry, to the best of our knowledge.

Another disadvantage is that there has been very little data collected as far as expansion valve ratings are concerned under these conditions. By referring to the Pressure-Temperature Charts of "Freon-22," ordinary condensing pressures run in the neighborhood of 145 p.s.i.g. and in order to produce -100°F. air temperatures, a refrigerant temperature within the evaporator of -110°F. must be attained. This represents a gauge pressure in the evaporator or suction of the compressor of approximately 26 1/2 in. This represents a pressure difference across the expansion valve of approximately 158 lbs.

Ordinary ratings of expansion valve capacities are listed with pressure differences across the valve of 60 to 80 and possibly 100 lbs., but expansion valve ratings for higher pressure differences have not been definitely established. As a result, the proper selection of expansion valves has been done only by trial and error and past experience and it is extremely difficult to properly size an expansion valve to a low temperature evaporator system when using two or three-stage compression.

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vancement to executive group. Please write BOX 3719, Air Conditioning & Refrigeration News.

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CAN YOU use 1/4-HP low-temperature model L2M units at \$52? Also other sizes. Write for literature and specifications. NEW YORK REFRIG. CO., 35 E. Fourth Street, New York, N. Y.

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NORGE SEALED units remanufactured and exchanged. Immediate delivery from stock, 1 year warranty. Write for prices and shipping instructions. Genuine Norge terminals for Norge sealed units. Complete set of three, \$145 plus postage. MODERN REFRIGERATION CO., INC., 12541 E. McNichols Road, Detroit 5, Michigan.

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Trade-Ins--

(Concluded from Page 1, Column 5)
service in the family's kitchen be noisy or not too attractive—because the sight of it is thus a stimulant to save up the 25% down payment on a new refrigerator. Often, the old box is returned within 60 days or so after delivery, as proof that the system works out.

"We deal with extreme fairness in every case," Czuleger said. "We point out in advance that any old refrigerator is bound to be noisy, and may be troublesome if used overlong."

"The prospect invariably realizes that using the old refrigerator is nothing but a temporary stop-gap while saving up for the new box, and most transactions are on exactly that basis."

"Of course, we sell many old refrigerators to low-income customers who cannot afford anything better, or do not want a more modern refrigerator. However, we have found it wise to maintain a stock of a dozen or more serviceable old boxes, which merely serve as holding agents for the future sale of a new refrigerator."

Selling on this basis, together with a lot of goodwill developed by long service to the community in its 25 years of experience, produced a volume of more than 400 Servels in 1950, and current sales are ahead of that figure, the Czuleger brothers point out.

Perhaps one of the most unusual stunts which the store has developed is bundling both the customer and her purchased refrigerator into a handsome pickup truck, and delivering both home, as soon as a sale is completed.

This is invariably a pleasant surprise to the customer which brings the company much word-of-mouth endorsement, the Czuleger brothers have found.

Ice Machine Produces 10-Ft. Tubes, Has 40-Ton Daily Capacity

AMARILLO, Tex.—The Amarillo Ice Co. has installed and put into operation an ice manufacturing process which produces ice in long, slender 10-ft. tubes, rather than in 300-lb. blocks.

The machine which produces this ice consists of one or more vertical shell containing tubes, an accumulator, cutter, ice chute, pumping tank, water pump, the necessary piping and valves, and an automatic control. The shell and tubes comprise the freezing unit. The entire machine is automatic, from the time the water enters the freezing unit until the arc-shaped pieces of ice leave the machine to be packed in bags for sale.

Charles E. Lamka, manager says the machine is producing about 25 tons of ice each day at the present time and has a capacity of 40 tons.

The Palo Duro Ice Co. is now producing what is known as sized ice, which comes in about six different sizes and can be used for every type of refrigeration. Palo Duro also produces ice in cubes, which is sold primarily to organizations and individuals for use at parties and banquets.


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Remington Room Cooler Sales Double In 1951; Future Outlook Good

AUBURN, N. Y.—Remington Corp.'s room size air conditioning units have been selling twice as fast during the first five months of fiscal 1951 than they did during the corresponding period in 1950.

That was reported by President Herbert L. Laube, on April 10, at the first annual stockholders' meeting since the Remington plant was moved from Cortland to Auburn. Laube said that the present backlog of unfilled orders is more than \$1,000,000.

For the first time since January, when production in Auburn was officially started, actual output surpassed 100% of the scheduled amount, during the month of March.

The outlook for the rest of the year is for steadily increased production—provided sufficient supplies of raw materials are available.

"We have gotten all the materials we need so far," said Laube, "but the outlook for the rest of the year is uncertain."

Laube told stockholders that the company had received several military orders, but is actively campaigning for more. He showed them a booklet put out by the firm illustrating the many uses which the armed forces can make of Remington's air conditioning and related equipment.

All five of the firm's directors were re-elected at the stockholders' meeting and a new one was added—Maurice I. Schwartz, prominent Auburnian. Directors re-elected were Caleb Candee Brown, Jr., Charles H. Churchill, Laube, Fred Stidfole, and M. Mark Watkins.

Following the stockholders' meeting the directors held a brief session and re-elected the officers of the firm, as follows: Laube, president; Stidfole and Watkins, vice presidents; Brown, secretary; and Kenneth E. Latimer, treasurer.

Millsom of Acme Shows How Liquid Chillers Aid Defense Production

NEW ORLEANS—Importance of the liquid chiller in defense production was noted by Carl Millsom, manager of Acme Industries, Inc.'s Flow Cold division, before a group of refrigeration, heating and air conditioning contractors, engineers, and dealers here recently.

The audience of 200 men came from five southern states to hear details on the Acme liquid chiller. The meeting, staged in the Metairie Country Club, was sponsored by Southern Heater Co., which is distributing the product in Louisiana, Arkansas, Mississippi, Alabama, and Tennessee.

Millsom explained how, through the use of liquid chilling, total defense production can be increased. Liquid chillers enable closer tolerances to be maintained in machine tool, grinding, broaching, and threading operations, and decrease reject or scrapped products, he said.

He put on a demonstration of the Flow Cold liquid chiller in operation with a cooling tower, a 3-ton air handling unit, and a forced air convector.

William R. Funk, Southern sales manager for Acme, covered engineering and design features of the product and application information in general.

Emmett Smith, president of Southern Heater, was host for the occasion.

Simons Made President Of New England REWA

STURBRIDGE, Mass. — Joseph Simons of the Joseph Simons Co., Hartford, Conn., was elected president of the New England Refrigeration Wholesalers during a recent meeting of the group at the Public House here.

Carl Payson of C. P. Payson & Co., Springfield, Mass., was re-elected secretary-treasurer.

Defense and "M" orders were discussed at length as was the current "Freon" situation. The association also discussed plans for its annual two-day outing to be held in Norwich, Conn., around the middle of September.

Wholesalers' Sales for February and First 2 Months Top

Inventories Also Up; Census Figures Show

WASHINGTON, D. C.—Wholesalers of commercial refrigeration parts and equipment and of appliances and specialties reported sales for February and for the first two months of the year far ahead of the same periods last year, though February sales were off some from January.

Inventories at the end of February, likewise, were up considerably from the same date last year and up slightly over January.

Statistics issued by the U. S. Bureau of the Census showed sales of refrigeration equipment and parts wholesalers for February were up 60% over the same month in 1950, but down 7% from January. For the first two months of the year, sales were up 61% over those months last year.

Inventories of this group on Feb. 28 were 26% higher than at the same time last year and 1% higher than in January.

February sales by appliances and specialties wholesalers were 36% higher than the preceding February and 13% under January. Two-months' sales were 70% above the same period last year.

Inventories increased 67% over last year and 2% since January.

Kind of Business and Geographic Division	SALES			No. of Firms Reporting	Reported Dollar Values (add '00)
	Feb. 1951 from Feb. 1950	Feb. 1951 from Jan. 1951	2 Mos. from 2 Mos. 1950		
Appliances and specialties wholesalers	+36	-13	+70	111	34,155
New England	+63	-5	+79	8	2,515
Middle Atlantic	+39	-17	+84	25	14,242
East North Central	+36	-14	+56	18	3,826
West North Central	+27	-28	+77	16	3,197
South Atlantic	+38	+10	+58	18	4,479
South Central	+11	+4	+33	9	1,879
Mountain	+23	-24	+59	6	794
Pacific	+29	-10	+60	11	3,223
Refrigeration equipment, parts (com'l)	+60	-7	+61	29	1,474
Middle Atlantic	+71	-8	+53	5	282
East North Central	+18	-13	+18	7	218
South Atlantic	+68	-10	+61	7	409
Pacific	+80	-4	+97	4	187

INVENTORY, END-OF-MONTH (AT COST)

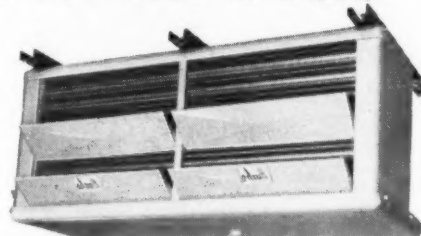
Kind of Business and Geographic Division	Per Cent Change		February 1951 Panel	
	Feb. 1951 from Feb. 1950	Feb. 1951 from Jan. 1951	No. of Firms Reporting	Reported Dollar Values (add '00)
Appliances and specialties wholesalers	+67	+10	88	29,339
New England	+55	- 1	6	1,411
Middle Atlantic	+128	+14	12	7,402
East North Central	+40	+ 2	15	3,237
West North Central	+70	+20	14	5,869
South Atlantic	+38	+12	17	4,117
South Central	+31	+ 3	8	2,430
Mountain	+39	- 4	5	902
Pacific	+84	+ 9	11	3,971
Refrigeration equipment, parts (com'l)	+26	+ 1	24	3,172
Middle Atlantic	*	*	*	*
East North Central	+37	+ 4	6	897
South Atlantic	+22	+ 5	7	970
Pacific	+34	0	4	382

*Insufficient data to show separately.

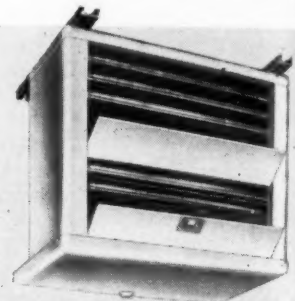
For product and comfort cooling

Buy the Best - and the Best is Bush

BUSH Standard Unit Coolers have won high regard throughout the Commercial Refrigeration and Air Conditioning Industry; they'll assure long, dependable service for your customers . . . and more profit for you.



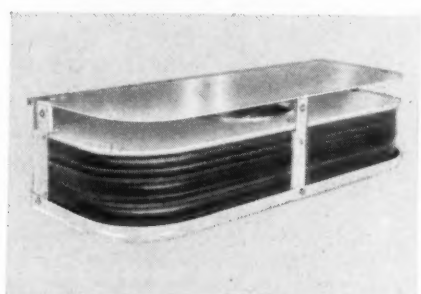
STANDARD UNIT COOLERS Slotted hangers for quick installation. Nine standard models.



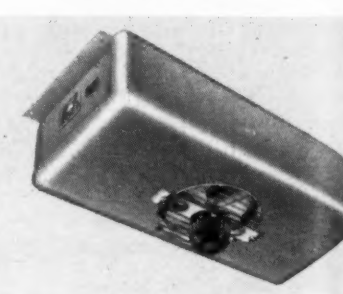
STANDARD UNIT COOLERS for use with AMMONIA and BRINE in 35° to 40° base



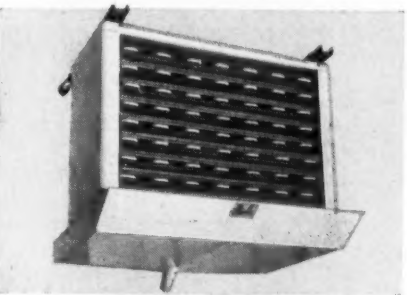
CEILING-JET UNIT COOLERS Permits complete utilization of profit-paying storage space.



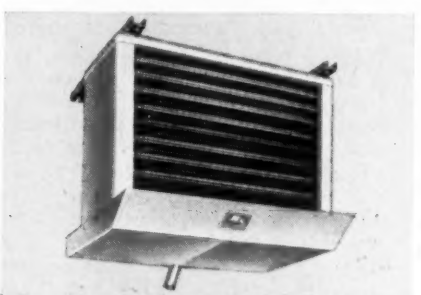
WJ UNIT COOLERS For installation at juncture of wall and ceiling. Simple to service.



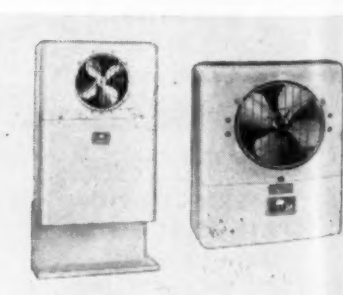
CEILING-WALL MOUNTED PANEL COOLERS Designed for low-head-room box installation



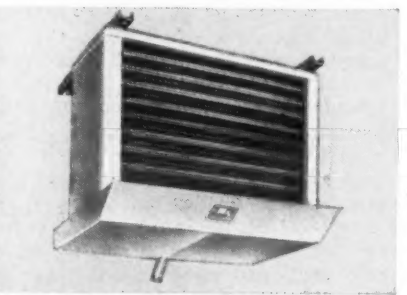
ELECTRIC DEFROST UNIT COOLERS Have built-in electrical defrosting equipment.



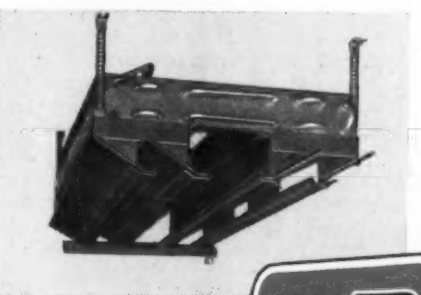
WATER DEFROST UNIT COOLERS Defrosts with tap water in five minutes.



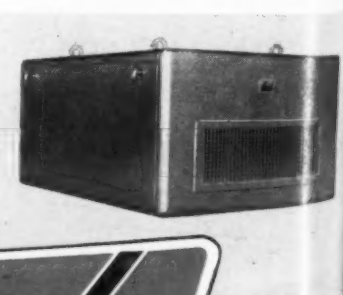
JR and WALL-MOUNTED PANEL COOLERS Compact Units for limited space installation



AMMONIA and BRINE UNITS For low temperature installations.



PLASTI-COOLERS Scientifically pitched plastic baffles.



COM-FO-COOLERS With no need for Freon. 1/2, 3/4, 1, 1 1/2, 2, 3, 4, 6, 8, 10, 12, 15, 20, 25, 30, 40, 50, 60, 75, 100 tons.



BUSH MANUFACTURING COMPANY • West Hartford, Conn.